1939

University of Maine, Catalog Number with Records for the Sessions of 1938-39, Announcements for the Sessions of 1939-40

University of Maine

THE MAINE BULLETIN

Vol. XLI MARCH 20, 1939 No. 11

University of Maine

Orono, Maine

Catalog Number with Records of the Sessions of 1938-39

Announcements for the Sessions of 1939-40

THE UNIVERSITY PRESS
ORONO, MAINE
1939

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Calendar

1939

January 3, Tuesday, Christmas Recess ends, 8:00 A.M.
January 25, Wednesday, Final Examinations begin in Arts and Sciences and Education
January 27, Friday, Final Examinations begin in Agriculture and Technology.
February 3, Friday, Final Examinations end. End of Fall Semester, 5:05 P.M.

SPRING SEMESTER

February 4, Saturday, Registration, 8:00 A.M. to 12:00 M.
February 6, Monday, Spring Semester begins, 8:00 A.M.
February 22, Wednesday, Washington's Birthday, a holiday.
March 18, Saturday, Written Comprehensive Examinations, College of Arts and Sciences.
March 25, Saturday, Spring Recess begins at 11:30 A.M.
March 28, Tuesday, Mid-semester reports due at Registrar's office.
April 4, Tuesday, Spring Recess ends, 8:00 A.M.
April 24, Monday-April 29, Saturday, Oral Comprehensive Examinations, College of Arts and Sciences.
May 22, Monday-May 24, Wednesday, Entrance Examinations.
May 30, Tuesday, Final Examinations begin in Arts and Sciences and Education.
May 31, Wednesday, Final Examinations begin in Agriculture and Technology.
June 7, Wednesday, Final Examinations end.
June 9, Friday, Class Day.
June 10, Saturday, Alumni Day.
June 11, Sunday, Baccalaureate Address.
June 12, Monday, Commencement.

SUMMER CAMP

June 19, Monday, Civil Engineering and Forestry Camp begins.
July 29 Saturday, Camp ends.

SUMMER SESSION

July 5, Wednesday, Registration 8:00 A.M. to 12:00 M. and 1:30 to 4:30 P.M.
July 6, Thursday, Classes begin.
August 12, Saturday, Summer Session ends, 12:00 M.

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FALL SEMESTER

September 11, Monday-September 12, Tuesday, Entrance Examinations.
September 13, Wednesday, Registration of freshmen. First day of Freshman Week.
September 18, Monday, Registration of transfer students, 10:00 A.M. to 12:00 M. and 2:00 to 3:00 P.M.
September 19, Tuesday, Registration of Upperclassmen, 8:00 A.M. to 12:00 M. and 1:30 to 3:00 P.M.
November 21, Tuesday, Mid-semester reports due at Registrar's office.
November 29, Wednesday, Thanksgiving Recess begins, 11:30 A.M.
December 4, Monday, Thanksgiving Recess ends, 8:00 A.M.
December 15, Friday, Christmas Recess begins, 11:30 A.M.

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January, 2, Tuesday, Christmas Recess ends, 8:00 A.M.
January 24, Wednesday, Final Examinations begin in Arts and Sciences and Education.
January 26, Friday, Final Examinations begin in Agriculture and Technology.
February 2, Friday, Final Examinations end. End of Fall Semester, 5:05 P.M.

SPRING SEMESTER

February 3, Saturday, Registration, 8:00 A.M. to 12:00 M.
February 5, Monday, Spring Semester begins, 8:00 A.M.
February 22, Thursday, Washington's Birthday, a holiday.
March 16, Saturday, Written Comprehensive Examinations, College of Arts and Sciences.
March 23, Saturday, Spring Recess begins, 11:30 A.M.
March 26, Tuesday, Mid-semester reports due in Registrar's office.
April 2, Tuesday, Spring Recess ends, 8:00 A.M.

April 22, Monday-April 27, Saturday, Oral Comprehensive Examinations, College of Arts and Sciences.
May 20, Monday-May 22, Wednesday, Entrance Examinations.
May 28, Tuesday, Final Examinations begin in Arts and Sciences and Education.
May 29, Wednesday, Final Examinations begin in Agriculture and Technology.
June 5, Wednesday, Final Examinations end.
June 7, Friday, Class Day.
June 8, Saturday, Alumni Day.
June 9, Sunday, Baccalaureate Address.
June 10, Monday, Commencement.

Board of Trustees

Edward Everett Chase, B.A., President Term expires January 22, 1943	Portland
Thomas Edward Houghton, Clerk Term expires May 6, 1941	Fort Fairfield
Bertram Everett Packard, B.A., LL.B., Ed.D., ex officio	Augusta
Frank Porter Washburn Term expires June 25, 1939	Augusta
John Thomas Gyger, M.S. Term expires November 20, 1940	Portland
Eugene Boutelle Sanger, Ph.B., M.D., F.A.C.S. Term expires November 20, 1940	Bangor
Raymond Webber Davis, B.A. Term expires July 18, 1942	Guilford
William Stockdale Nutter Term expires June 5, 1943	Sanford
Harold Merle Pierce, B.A. Term expires July 18, 1939	Bangor

Executive Committee, Davis, Packard, Washburn

Officers of Administration

OFFICERS OF THE UNIVERSITY

PRESIDENT. Arthur Andrew Hauck, Alumni Hall; Campus.
DEAN OF MEN. Lamert Seymour Corbett, 27 Rogers Hall; Campus.
DEAN OF WOMEN. Edith Grace Wilson, 16 Stevens, South; 6 North Main Street.
REGISTRAR. James Adrian Gannett, Alumni Hall; 166 Main Street.
ASSISTANT REGISTRAR. Evelyn Taylor, Alumni Hall; Stillwater.
RECORDER. Addie Matilda Weed, Alumni Hall; Veazie.
DIRECTOR OF ADMISSIONS. Percy Fremont Crane, Alumni Hall; 32 Forest Avenue.
LIBRARIAN. Louis Tappe Ibbotson, Library; University Place
UNIVERSITY PHYSICIAN. Walter Charles Hall, M.D., 20 Fernald Hall; Mill Street.
TREASURER. Frederick Shaw Youngs, Alumni Hall.
TREASURER EMERITUS. Charles John Dunn, 114 Main Street.
HENRY LEROY DOTEN, Business Manager and Purchasing Agent.
ACCOUNTANT. Irving Pierce, Alumni Hall; 34 Sixth Street, Old Town.
STEWARD. William Carl Wells, Alumni Hall; 60 Oak Street.
ALUMNI SECRETARY AND EXECUTIVE SECRETARY, ENDOWMENT AND DONATIONS. Charles Edward Crossland, 11 Fernald Hall; 5 Riverdale.
DIRECTOR OF PLACEMENT BUREAU AND ASSISTANT ALUMNI SECRETARY. Philip Judd Brockway, 12 Fernald Hall; 90 Forest Avenue.
CATALOG EDITOR. Roy Merle Peterson, 3 Stevens, North; 29 Bennoch Street.
ASSISTANT TO THE DEAN OF MEN. Maynard Alton Hincks, 27 Rogers Hall; 36 Main Street.

OFFICERS OF DIVISIONS OF THE UNIVERSITY

COLLEGE OF AGRICULTURE. Arthur Lowell Deering, Dean, 16 Winslow Hall; 160 College Road.
COLLEGE OF ARTS AND SCIENCES. Edward Jones Allen, Dean, 100 Stevens Hall; 378 College Road.
SCHOOL OF EDUCATION. Olin Silas Lutes, Dean, 24 Stevens, South; College Road.

College of Technology. Paul Cloke, Dean, 12 Wingate Hall; 49 Forest Avenue.

Graduate Study. Roy Merle Peterson, Acting Dean, 3 Stevens, North; 29 Bennoch Street.

Summer Session. Roy Merle Peterson, Director, 3 Stevens, North; 29 Bennoch Street.

Agricultural Extension Service. Arthur Lowell Deering, Director, 16 Winslow Hall; 160 College Road.

Maine Agricultural Experiment Station. Fred Griffee, Director, Holmes Hall; 55 Bennoch Street.

Technology Experiment Station. Paul Cloke, Director, 12 Wingate Hall; 49 Forest Avenue.

OF THE DEPARTMENTS

Agricultural Economics and Farm Management. Professor Merchant, 36 Winslow Hall; 39 Mill Street.

Agricultural Education. Professor Hill, 22 Agricultural Engineering Building; 57 College Road.

Agronomy and Agricultural Engineering. Professor Chucka, 2 Agricultural Engineering Building; 65 Forest Avenue.

Animal Industry. Professor Corbett, 27 Rogers Hall; Campus.

Bacteriology and Biochemistry. Professor Hitchner, 13 Winslow Hall; 51 Bennoch Street.

Biology (Agricultural Experiment Station). Professor Dove, Holmes Hall; 142 Park Street.

Botany and Entomology. Professor Steinmetz, 24 Coburn Hall; 36 College Road.

Chemistry and Chemical Engineering. Professor Bradt, 329 Aubert Hall; 204 Broadway, Bangor.

Chemistry (Agricultural Experiment Station). Professor Tobey, Holmes Hall; 5 Pond Street.

Civil Engineering. Professor Evans, 21 Wingate Hall; 8 Kell Street.

Classics. Professor L. F. Smith, 110 Stevens Hall; 102 North Main Street.

Economics and Sociology. Professor Kirshen, 46 Stevens, South; 46 North Main Street.

Education. Professor Lutes, 24 Stevens, South; College Road, Stillwater.

Electrical Engineering. Professor Barrows, 2 Lord Hall; 40 Myrtle Street.

Engineering Drafting. Professor Kent, 30 Wingate Hall; 16 Sixth Street, Bangor.

English. Professor Ellis, 200 Stevens Hall; 29 Park Street.
Entomology (Agricultural Experiment Station). Professor Lathrop, Holmes Hall; 139 Main Street.
Forestry. Professor Demeritt, 24 Winslow Hall; 15 University Place.
German. Professor Drummond, 325 Stevens Hall; 61 Bennoch Street.
History and Government. Professor E. F. Dow, 145 Stevens Hall; Bennoch Road, Stillwater.
Home Economics. Professor Greene, 24 Merrill Hall; 6 University Place.
Horticulture. Professor Waring, Horticulture Greenhouse; 24 University Place.
Mathematics and Astronomy. Professor Willard, 130 Stevens Hall; 100 Bennoch Street.
Mechanical Engineering. Professor Sweetser, 1 Lord Hall; 109 Main Street.
Mechanics. Professor Weston, 1 Fernald Hall; College Road, Stillwater.
Military Science and Tactics. Lieutenant Colonel Alcott, Armory; 6 North Main Street.
Music. Professor Sprague, 15 Stevens, North; 217 Union Street, Bangor.
Philosophy. Professor Levinson, 335 Stevens Hall; 78 North Main Street.
Physical Education. Professor Wallace, Memorial Gymnasium; 45 Park Street.
Physics. Professor Bennett, 200 Aubert Hall; 22 Myrtle Street.
Plant Pathology (Agricultural Experiment Station). Professor Folsom, Holmes Hall; 63 Forest Avenue.
Psychology. Professor Dickinson, 31 Stevens, North; 91 Bennoch Street.
Public Speaking. Professor Bailey, 240 Stevens Hall; University Place.
Pulp and Paper Technology. Professor Bray, 135 Aubert Hall; 75 Bennoch Street.
Romance Languages. Professor Peterson, 3 Stevens, North; 29 Bennoch Street.
Short Courses. Director Loring, 11 Winslow Hall; 79 Bennoch Street.
Zoology. Professor Murray, 16 Coburn Hall; 184 Main Street.

OF THE DORMITORIES

Balentine Hall, Pearl Orletta Baxter, Superintendent.
B.S. in Ed., Northwestern University, 1927; M.A., Boston University, 1937.
Balentine Hall, Edna Lawton Sheraton, Assistant Superintendent.
R.N., New England Deaconess Hospital, 1909.

Colvin Hall, Julia Delacour Hill Whittlesey, Superintendent.
A.B., Vassar, 1896; M.A., State Teachers College, Montclair, New Jersey, 1935.
Elms, Christine Whidden Lowe, Superintendent.
Maples, Gertrude Hayes, Superintendent.
North Hall, Mabel Frances McGinley, Superintendent.
B.S., Maine, 1905.
South Hall, Velma Katherine Oliver, Director.
B.A., Maine, 1925; M.A., 1938.

MAJOR ADMINISTRATIVE ASSISTANTS

President's office. Florence Elizabeth Johnson, Secretary to the President, Alumni Hall.

Dean's office, College of Agriculture. Yvonne Morin, Secretary to the Dean, 16 Winslow Hall.

Dean's office, College of Arts and Sciences. Kathleen Kelley, Secretary to the Dean, 100A Stevens Hall.

Dean's office, School of Education. Thelma Demont, Secretary to the Dean, 22 Stevens, South.

Dean's office, College of Technology. Mildred French Creamer, Secretary to the Dean, 12 Wingate Hall.

Dean of Men's office. Prudence Stormann, Secretary to the Dean, 27 Rogers Hall.

Treasurer's office. Dorothea Lewis Miller, Secretary to the Treasurer, Alumni Hall.

Director of Admission's office. Paulyne Rowell, Secretary to the Director, B.A., Maine, 1927, Alumni Hall.

Director's office, Maine Agricultural Experiment Station. Mary Norton Cameron, Secretary to the Director, Holmes Hall.

Other Officers

LIBRARY

Dorothy Smith, Reference Librarian.
B.S., Simmons School of Library Science, 1921.
Mary Florence Reed, Cataloger.
B.A., Maine, 1929; B.S., Simmons School of Library Science, 1930.
Sally Palmer, Circulation Assistant.
B.A., Maine, 1927.
Barbara Littlefield Martin, General Assistant.
A.B., Bates, 1935; B.S., Simmons School of Library Science, 1936.
Erma Littlefield Rich, Clerk.

HEALTH SERVICE

Blanche Imelda Castonguay, Resident Health Nurse.
R.N., Queens Hospital, Portland, 1928.
Helen Louise O'Leary, Resident Health Nurse.
R.N., Eastern Maine General Hospital, Bangor, 1933.

BUILDINGS AND GROUNDS

John Carroll Dempsey, Acting Superintendent of Buildings and Grounds.
John White Glover, Steam Engineer.
B.S., Maine, 1915.

UNIVERSITY PRESS

Roy Wesley Libby, Superintendent.

Faculty of Instruction

(*Dates in parentheses indicate year of initial appointment*)

Russell, Fremont Lincoln; B.S., Maine, 1885; V.S., New York College of Veterinary Surgeons, 1886; Professor Emeritus of Bacteriology and Veterinary Science; 38½ Oak Street.

Stevens, James Stacy; B.S., Rochester, 1885; M.S., 1888; M.S., Syracuse, 1889; LL.D., Rochester, 1907; Litt.D., Maine, 1922; Dean Emeritus of the College of Arts and Sciences; 175 Main Street.

Colvin, Caroline; A.B., Indiana, 1893; Ph.D., University of Pennsylvania, 1901; LL.D., Maine, 1927; Professor Emeritus of History and Government.

Simmons, George Edward; B.S., Ohio Northern, 1902; M.S., 1905; B.Sc., Ohio State, 1909; D.Sc., Ohio Northern, 1922; Professor Emeritus of Agronomy; 7 Gilbert Street.

Hart, James Norris; B.C.E., Maine, 1885; C.E., 1890; S.M., Chicago, 1897; Sc.D., Maine, 1908; Ph.D., 1922; Dean Emeritus of the University and Professor Emeritus of Mathematics and Astronomy; 123 Main Street.

Patch, Edith Marion; B.S., Minnesota, 1901; M.S., Maine, 1910; Ph.D., Cornell University, 1911; Sc.D., Maine, 1937; Entomologist Emeritus; Braeside, College Road.

Chase, George Davis; A.B., Harvard, 1889; A.M., 1895; Ph.D., 1897; LL.D., Maine, 1927; Dean Emeritus of Graduate Study and Professor Emeritus of Classics; 143 Main Street.

Abbott, Herbert Burr (1920); Technician, Department of Mechanical Engineering, College of Technology; Crosby Mechanical Laboratory; 159 Stillwater Avenue, Old Town.

Alcott, Robert Kerr (1935); Lieutenant Colonel, Infantry (D.O.L.), U. S. Army; LL.B., Minnesota, 1904; Professor of Military Science and Tactics; Armory; 6 North Main Street.

Aldous, Clarence Moroni (1936); B.S., Utah State, 1917; M.S., University of Minnesota, 1923; Associate Professor of Game Management, College of Agriculture; 9 Coburn; 67 Mill Street.

Allen, Edward Jones (1936); A.B., Colorado College, 1921; A.M., Columbia, 1923; Ph.D., 1936; Dean of the College of Arts and Sciences and Professor of Economics, member of Graduate Faculty; 100 Stevens; 378 College Road.

*Arnold, Frances Elizabeth (1919); B.A., Maine, 1910; M.A., 1923; Assistant Professor of Romance Languages, College of Arts and Sciences; 5 Stevens, North; 11 Pond Street.

†Ashby, Stanley Royal (1930); B.A., Texas, 1904; B.A., Oxford, 1907; M.A., 1923; A.M., Harvard, 1925; Ph.D., 1927; Associate Professor of English, College of Arts and Sciences; 235 Stevens; 67 Main Street.

Ashman, Robert Irving (1930); A.B., Cornell University, 1913; M.F., Yale, 1929; Associate Professor of Forestry, College of Agriculture; 24 Winslow; 69 Mill Street.

Ashworth, John H (1919); A.B., Emory and Henry, 1906; Ph.D., Johns Hopkins, 1914; Professor of Economics and Sociology, College of Arts and Sciences, member of Graduate Faculty; 44 Stevens, South; 88 North Main Street.

*Bailey, Mark (1920); A.B., Yale, 1915; A.M., University of Michigan, 1917; Professor and Head of Department of Public Speaking, College of Arts and Sciences; 240 Stevens; University Place.

*Baker, Gregory (1935); B.S., Maine, 1924; Instructor in Forestry, College of Agriculture; 24 Winslow.

Barrows, William Edward (1912); B.S., Maine, 1902; E.E., 1908; Professor and Head of Department of Electrical Engineering, College of Technology, member of Graduate Faculty; 2 Lord; 40 Myrtle Street.

Baxter, Pearle Orletta (1937); B.S. in Ed., Northwestern, 1927; M.A., Boston University, 1937; Instructor in English, College of Arts and Sciences; 225 Stevens; Balentine Hall.

Bennett, Clarence Edwin (1934); Ph.B., Brown, 1923; Sc.M., 1924; Ph.D., 1930; Associate Professor and Acting Head of Department of Physics, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 200 Aubert; 22 Myrtle Street.

Bennett, Earl Freeman (1938); B.S., Maine, 1928; M.S., Massachusetts Institute of Technology, 1930; Instructor in Civil Engineering and Research Assistant in Technology Experiment Station, College of Technology; B1 Lord; 4 Middle Street.

Bliss, Warren Herbert (1931); B.S., Michigan State College, 1928; M.S., 1931; Instructor in Electrical Engineering, College of Technology; 4 Lord; 43 Pine Street.

Bogan, Edgar Junior (1929); A.B., Miami, 1926; A.M., Princeton, 1929; Instructor in Chemistry, College of Technology; 425 Aubert; 4 Myrtle Street.

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*On leave of absence, 1938-39.

†On leave of absence, spring semester, 1938-39.

Borgman, Bernice Dena (1938); B.S., Iowa State, 1934; M.S., 1935; Instructor in Home Economics, College of Agriculture; 13 Merrill; 162 College Road.

Bowden, Ralph Freeman (1925); Technician in Department of Electrical Engineering, College of Technology; 28 Lord; 144 Park Street.

Bradt, Wilber Elmore (1936); A.B., Indiana, 1922; M.A., 1924; Ph.D., 1926; Professor of Chemistry and Head of Department of Chemistry and Chemical Engineering, College of Technology, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 329 Aubert; 204 Broadway, Bangor.

Brann, Bertrand French (1917); B.S., Maine, 1909; M.S., 1911; S.M., Massachusetts Institute of Technology, 1912; Professor of Chemistry, College of Technology; 221 Aubert; 370 College Road.

Brautlecht, Charles Andrew (1919); Ph.B., Yale, 1906; Ph.D., 1912; Professor of Chemistry and Chemical Engineering, College of Technology, member of Graduate Faculty; 333 Aubert; 63 Bennoch Street.

Bray, Paul DeCosta (1923); B.S., Maine, 1914; Ch.E., 1918; Professor and Head of Department of Pulp and Paper Technology, College of Technology, member of Graduate Faculty; 135 Aubert; 75 Bennoch Street.

Brice, Fred Mansfield (1921); Professor of Physical Education; Memorial Gymnasium; 13 Pine Street.

Bricker, Herschel Leonard (1928); A.B., Coe, 1928; Assistant Professor of Public Speaking, College of Arts and Sciences; 330 Stevens; 58 Main Street.

Brush, Edward Newcomb (1928); A.B., Vermont, 1925; A.M., Harvard, 1926; Ph.D., 1932; Associate Professor of Psychology, College of Arts and Sciences, member of Graduate Faculty; 39 Stevens, North; 391 College Road.

Bryan, Noah Rosenberger (1922); B.A., Pennsylvania State, 1913; A.M., University of Pennsylvania, 1918; Ph.D., Columbia, 1921; Associate Professor of Mathematics, College of Arts and Sciences, member of Graduate Faculty; 135 Stevens; 4 University Place.

*Burtt, Everett Johnson, Jr. (1939); A.B., Berea, 1935; M.A., Duke, 1937; Instructor in Economics and Sociology, College of Arts and Sciences; 44 Stevens, South; 3 Riverdale.

Buzzell, Marion Stephanie (1919); B.A., Maine, 1914; M.A., 1915; Assistant Professor of Romance Languages, College of Arts and Sciences; 5 Stevens, North; 222 North Brunswick Street, Old Town.

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*Appointed, January 16, 1939.

CASSIDY, MARGARET EILEEN (1937); Diploma, Sargent School for Physical Education, 1928; Part-time Instructor of the Dance; Alumni; 363 State Street, Bangor.

CAULFIELD, JOHN GEORGE LESLIE (1926); B.S., Maine, 1924; M.S., 1926; Assistant Professor of Pulp and Paper Technology, College of Technology; 135 Aubert; 208 French Street, Bangor.

CHADBOURNE, AVA HARRIET (1915); B.A., Maine, 1915; M.A., 1918; A.M., Columbia, 1919; Ph.D., 1928; Professor of Education, School of Education, member of Graduate Faculty; 14 Stevens, South; Stillwater.

CHADBOURNE, WALTER WHITMORE (1922); B.A., Maine, 1920; M.B.A., Harvard, 1922; Ph.D., 1935; Associate Professor of Economics and Sociology, College of Arts and Sciences; 30 Stevens, South; 59 College Road.

CHAPMAN, CHAUNCEY WALLACE LORD (1919); B.S., Maine, 1914; M.S., 1921; Assistant Professor of Forestry, College of Agriculture; 24 Winslow; 13 Park Street.

CHUCKA, JOSEPH ANTHONY (1934); B.S., Wisconsin, 1927; M.S., 1928; Ph.D., 1930; Professor and Head of Department of Agronomy and Agricultural Engineering, College of Agriculture, member of Graduate Faculty;2 Agricultural Engineering Building; 65 Forest Avenue.

CLAPP, ROGER (1929); B.S., Cornell University, 1928; M.S., Maine, 1932; Assistant Professor of Horticulture, College of Agriculture; Horticulture Greenhouse; 505 College Road.

CLOKE, PAUL (1926); E.E., Lehigh, 1905; M.S., 1913; Eng.D., Maine, 1934; Dean of the College of Technology, Director of the Technology Experiment Station and Professor of Electrical Engineering, member of Graduate Faculty; 12 Wingate; 49 Forest Avenue.

COGGESHALL, REGINALD (1936); A.B., Harvard, 1916; A.M., 1932; Assistant Professor of English, College of Arts and Sciences, and Director of University Publicity; 340 Stevens; 60 Forest Avenue.

CONEY, BEATRICE (1937); B.S., East Texas State Teachers College, 1928; M.S., Iowa State College, 1937; Assistant Professor of Home Economics, College of Agriculture, member of Graduate Faculty; 13 Merrill; 43 Main Street.

COOPER, GERALD PAUL (1936); B.S., Michigan State Normal, 1931; M.A., University of Michigan, 1932; Instructor in Zoology, College of Arts and Sciences; 7 Coburn; 15 Pond Street.

COOPER, JAMES GORDON, JR., (1938); Major, Infantry (D.O.L.), U. S. Army; Associate Professor of Military Science and Tactics; Armory; 188 Main Street.

CORBETT, LAMERT SEYMOUR (1913); B.S., Massachusetts State, 1909; B.S.A., Boston University, 1909; M.S., Kentucky, 1913; Professor and Head of

Department of Animal Industry, College of Agriculture, Dean of Men, member of Graduate Faculty; 27 Rogers; Campus.

CRABTREE, KENNETH GERARD (1926); S.B., Massachusetts Institute of Technology, 1923; Assistant Professor of Electrical Engineering, College of Technology; 4 Lord; 43 Main Street.

CRANDON, MARY PERKINS (1937); B.A., Maine, 1923; M.A., Bryn Mawr, 1924; Instructor in English, College of Arts and Sciences; 220 Stevens; Bennoch Street, Stillwater.

CRAWFORD, JOHN RAYMOND (1930); B.A., Culver-Stockton, 1924; M.A., State University of Iowa, 1929; Ph.D., 1931; Assistant Professor of Education and Director of Bureau of Educational Research and Service, School of Education, member of Graduate Faculty; 18 Stevens, South; 23 Pond Street.

CREAMER, WALTER JOSEPH (1919); B.S., Maine, 1918; E.E., 1921; B.A., 1923; Professor of Communication Engineering, College of Technology, Director of Freshman Week, member of Graduate Faculty; 28A Lord; 331 Center Street, Bangor.

CROFUTT, CHARLES BURTON (1926); B.A., Cornell College, 1919; M.S., State University of Iowa, 1920; Ph.D., 1923; Associate Professor of Physics, College of Arts and Sciences, member of Graduate Faculty; 300 Aubert; 30 Mill Street.

*CROSBY, RUTH (1929); A.B., Mount Holyoke, 1919; A.M., Radcliffe, 1920; Ph.D., 1929; Assistant Professor of English, College of Arts and Sciences; 230 Stevens; 56 Main Street.

CURTIS, THEODORE SMALL (1930); B.S., Maine, 1923; Faculty Manager of Athletics; Memorial Gymnasium; 10 Gilbert Street.

DAVEE, EVERETT WILLARD (1903); Instructor in Mechanical Engineering, College of Technology; Mechanical Shops; 46 College Road.

DEERING, ARTHUR LOWELL (1912); B.S., Maine, 1912; Sc.D., 1934; Dean of the College of Agriculture and Director of Extension Service, member of Graduate Faculty; 16 Winslow; 160 College Road.

DEMERITT, DWIGHT BURGESS (1934); B.S., Maine, 1922; M.F., Yale, 1923; Professor and Head of Department of Forestry, College of Agriculture, member of Graduate Faculty; 24 Winslow; 15 University Place.

DICKINSON, CHARLES ALEXIUS (1926); A.M., Clark, 1922; Ph.D., 1925; Professor and Head of Department of Psychology, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 31 Stevens, North; 91 Bennoch Street.

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*On leave of absence, fall semester, 1938-39.

DIRKS, CHARLES ORVILLE (1927); B.S., Kansas State College, 1924; M.S., Iowa State College, 1925; Ph.D., Cornell University, 1935; Associate Professor of Entomology, College of Agriculture, member of Graduate Faculty; 32 Coburn; 9 Peters Street.

DORSEY, LLEWELLYN MORSE (1917); B.S., Maine, 1916; M.S., 1923; Professor of Dairy Husbandry, College of Agriculture, member of Graduate Faculty; 28 Rogers; 67 Bennoch Street.

DOW, EDWARD FRENCH (1929); B.S., Bowdoin, 1925; A.M., Harvard, 1926; Ph.D., 1932; Professor and Head of Department of History and Government, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 145 Stevens; Bennoch Road, Stillwater.

DOW, GEORGE FARRINGTON (1934); B.S., Maine, 1927; M.S., 1929; Ph.D., Cornell University, 1938; Associate Professor of Agricultural Economics and Farm Management, College of Agriculture; 38 Winslow; 35 Park Street.

DRUMMOND, ROBERT RUTHERFORD (1909); B.S., Maine, 1905; Ph.D., University of Pennsylvania, 1909; Professor and Head of Department of German, College of Arts and Sciences, member of Graduate Faculty; 325 Stevens; 61 Bennoch Street.

DUSENBURY, DELWIN BENNETT (1938); B.A., Wisconsin, 1936; M.A., Minnesota, 1937; Instructor in Public Speaking, College of Arts and Sciences; 240 Stevens; 30 Crosby Street.

ELLIOTT, WALLACE HENRY (1937); B.S., Maine, 1926; M.S., Cornell University, 1937; Assistant Professor of Agricultural Education, College of Agriculture; 22 Agricultural Engineering Building; 38 North Main Street.

ELLIS, MILTON (1919); B.A., Maine, 1907; M.A., 1908; A.M., Harvard, 1909; Ph.D., 1913; Professor and Head of Department of English, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 200 Stevens; 29 Park Street.

EVANS, WESTON SUMNER (1920); B.S., Maine, 1918; M.S., 1923; Professor and Head of Department of Civil Engineering, College of Technology, member of Graduate Faculty; 21 Wingate; 8 Kell Street.

*FITCH, ALBERT LEWIS (1919); A.B., Albion, 1911; A.M., 1912; Ph.D., University of Michigan, 1916; Professor of Physics, College of Arts and Sciences, member of Graduate Faculty.

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*On leave of absence, 1938-39.

FLEWELLING, HOWARD LLOYD (1932); A.B., Dartmouth, 1921; M.A., Maine, 1929; Ph.D., University of Michigan, 1932; Assistant Professor of English, College of Arts and Sciences; 230 Stevens; Stillwater Avenue, Stillwater.

FULLER, JOHN LANGWORTHY (1937); B.S., Bates, 1931; Ph.D., Massachusetts Institute of Technology, 1935; Instructor in Zoology, College of Arts and Sciences; 21a Coburn; 33 Forest Avenue.

GANNETT, JAMES ADRIAN (1908); B.S., Maine, 1908; M.A., 1928; Registrar; Alumni; 166 Main Street.

GARDNER, LEIGH PHILBROOK (1920); B.S., Maine, 1918; M.S., 1923; Assistant Professor of Poultry Husbandry, College of Agriculture; Poultry Building; 45 Oak Street.

*GILLILAND, WILLIAM LESTER (1927); B.S., University of Washington, 1920; M.S., 1921; Ph.D., Massachusetts Institute of Technology, 1925; Assistant Professor of Chemistry, College of Technology; 423 Aubert; 26 Myrtle Street.

GLANVILLE, ALBERT DOUGLAS (1937); A.B., Cornell University, 1927; M.A., Illinois, 1928; Ph.D., Cornell University, 1932; Instructor in Psychology, College of Arts and Sciences; 39 Stevens, North; 33 Peters Street.

GOULD, GLADYS MARIE (1928); B.S., Maine, 1922; Part-Time Instructor in Home Economics in charge of Student Teaching, College of Agriculture; Brewer High School; 33 Park Street, Bangor.

GREENE, PEARL STUART (1923); B.A., Northwestern, 1909; B.S., Lewis Institute, 1914; A.M., Columbia, 1923; Professor and Head of Department of Home Economics, College of Agriculture, member of Graduate Faculty; 24 Merrill; 6 University Place.

HALL, HOWE WIGGIN (1923); B.S., Maine, 1914; M.S., 1925; Assistant Professor of Animal Husbandry, College of Agriculture; 25 Rogers; 24 Crosby Street.

HARABOSKY, ROMAN HENRY (1937); Sergeant (D.E.M.L.), Coast Artillery, U. S. Army; Instructor in Military Science and Tactics; Armory; 54 Pine Street.

HAUCK, ARTHUR ANDREW (1934); A.B., Reed, 1915; Ph.D., Columbia, 1932; LL.D., Lafayette, 1936; LL.D., New Hampshire, 1937; President of the University; Alumni; Campus.

HAW, JOSEPH CUMMING (1936); B.S., United States Military Academy, 1915; Lieutenant Colonel, Coast Artillery Corps (D.O.L.), U. S. Army; Associate Professor of Military Science and Tactics; Armory; 25 Parkview Avenue, Bangor.

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*On leave of absence, 1938-39.

HAWTHORNE, MANNING (1938); A.B., Bowdoin, 1930; M.A., University of North Carolina, 1937; Instructor in English, College of Arts and Sciences; 230 Stevens; 363 Stillwater Avenue, Old Town.

HENKLE, HARRY LYNN (1937); Major, Infantry (D.O.L.), U. S. Army; Associate Professor of Military Science and Tactics; Armory; 17 Peters Street.

HESS, ROBERT WILLIAM (1938); B.S., Iowa State, 1934; M.F., Yale, 1936; Instructor in Forestry, College of Agriculture; 24 Winslow; 12 Middle Street.

HIGHLANDS, MATTHEW EDWARD (1935); B.A., Maine, 1928; S.M., Massachusetts Institute of Technology, 1934; Assistant Professor of Bacteriology, College of Agriculture; 13 Winslow; 54 Main Street.

HILL, ARTHUR ST. JOHN (1918); E.E., Polytechnic Institute of Brooklyn, 1911; M.S.E., University of Michigan, 1932; E.E., 1937; Professor of Electrical Engineering, College of Technology, member of Graduate Faculty; 5 Lord; 9 Kell Street.

HILL, HERBERT STAPLES (1918); A.B., Bowdoin, 1905; Professor and Head of Department of Agricultural Education, College of Agriculture; 22 Agricultural Engineering Building; 57 College Road.

HINCKS, MAYNARD ALTON (1932-1935) (1938); B.S., Maine, 1932; M.S., 1935; Instructor in Animal Husbandry, College of Agriculture, and Assistant to the Dean of Men; 27 Rogers; 36 Main Street.

HITCHNER, ELMER REEVE (1922); B.S., Pennsylvania State, 1915; M.S., 1916; Ph.D., Wisconsin, 1931; Professor of Bacteriology and Head of Department of Bacteriology and Biochemistry, College of Agriculture, member of Graduate Faculty; 13 Winslow; 51 Bennoch Street.

HOBBAH, REGINALD VYVYAN (1937); B.S., University of Pittsburgh, 1931; M.A., 1934; Instructor in Economics, College of Arts and Sciences; 30 Stevens, South; 3 Spencer Lane.

HUDDILSTON, JOHN HOMER (1899); B.A., Baldwin-Wallace, 1890; M.A., 1892; A.B., Harvard, 1893; Ph.D., Munich, 1898; Professor of Ancient Civilization and Lecturer on Art History, College of Arts and Sciences; 36 Stevens, South; 193 Main Street.

HYLAND, FAY (1926); B.S., Michigan State College, 1925; M.S., Maine, 1929; Assistant Professor of Botany, College of Agriculture; 31 Coburn; 15 Oak Street.

IBBOTSON, LOUIS TAPPE (1928); A.B., Hamilton, 1922; B.L.S., University of the State of New York, 1925; Librarian; Library; University Place.

JACKMAN, ERNEST DELMORE (1930); A.B., Colby, 1912; A.M., Columbia, 1924; Associate Professor of Education and Director of Teacher Training, School of Education, member of Graduate Faculty; 10 Stevens, South; College Road, Stillwater.

JENKINS, CHESTER ALBERT (1928); B.S., Dartmouth, 1911; M.S., Maine, 1931; Professor of Physical Education; Memorial Gymnasium; University Place.

JENNESS, LYLE CLAYTON (1923); B.S., New Hampshire, 1922; M.S., Maine, 1925; Associate Professor of Chemistry, College of Technology; 103A Aubert; 80 Forest Avenue.

JONES, MAURICE DANIEL (1913); B.S., Maine, 1912; M.S., 1927; Professor of Agricultural Economics and Farm Management and Manager of University Farm, College of Agriculture, member of Graduate Faculty; 36 Winslow; 164 College Road.

JORDAN, MAYNARD FRED (1919-21) (1925); B.A., Maine, 1916; M.A., 1921; Associate Professor of Mathematics and Astronomy, College of Arts and Sciences; 130 Stevens; University Place.

KELLEY, CALISTA BERTHENA (1938); B.S., Vermont, 1927; M.A., St. Lawrence, 1932; Instructor in Home Economics, College of Agriculture; 35a Merrill; 33 Bennoch Street.

KENT, BENJAMIN CALVIN (1918); B.S., Maine, 1912; Professor and Head of Department of Engineering Drafting, College of Technology; 30 Wingate; 16 Sixth Street, Bangor.

KENYON, WILLIAM CURTIS (1926); Instructor in Physical Education; Memorial Gymnasium; 83 Main Street.

KIMBALL, SPOFFORD HARRIS (1936); B.S., Denison, 1923; M.A., Pittsburgh, 1925; A.M., Harvard, 1929; Ph.D., 1932; Assistant Professor of Mathematics, College of Arts and Sciences; 135 Stevens; 66 College Road.

KIRSHEN, HIMY BENJAMIN (1929); B.S., Whitman, 1926; A.M., Columbia, 1929; Ph.D., Wisconsin, 1937; Associate Professor and Acting Head of Department of Economics and Sociology, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 46 Stevens, South; 46 North Main Street.

KLEIN, JOHN FREDERICK (1933); A.B., Cornell University, 1912; A.M., 1913; Ph.D., 1920; Associate Professor of German, College of Arts and Sciences; 320 Stevens; 66 College Road.

*KNOWLTON, THOMAS ANSON (1936); B.A., Maine, 1933; M.A., 1934; Instructor in Economics and Sociology, College of Arts and Sciences; 44 Stevens, South; 102 North Main Street.

LAMOREAU, FRED LINCOLN (1930); B.A., Maine, 1930, M.A., 1934; Instructor in Mathematics and Astronomy, College of Arts and Sciences; 120 Stevens; 28 Penobscot Street.

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*Resigned, December 31, 1938.

LAMSON, HERBERT DAY (1935); Ph.B., Brown, 1924; A.M., 1925; A.M., Harvard, 1934; Ph.D., 1935; Assistant Professor of Economics and Sociology, College of Arts and Sciences; 42 Stevens, South; 77 Bennoch Street.

LARSEN, KARL DAVIS (1934); B.A., Maine, 1929; M.A., 1930; Ph.D., Pennsylvania State, 1934; Assistant Professor of Physics, College of Arts and Sciences; 304 Aubert; 39 Pine Street.

LEAVITT, HAROLD WALTER (1917); B.S., Maine, 1915; C.E., 1918; M.S., 1921; Professor of Highway Engineering, and Secretary of Technology Experiment Station, College of Technology; 5 Wingate; 7 Park Street.

LEKBERG, HOWARD PARKER (1937); B.S., Worcester Polytechnic Institute, 1932; Instructor in Mechanical Engineering, College of Technology; 14 Lord; 43 Pine Street.

LENGYEL, HELEN ANNA (1924); Diploma, Sargent School for Physical Education, 1915; B.A., Maine, 1927; M.A., 1936; Associate Professor of Physical Education for Women; Alumni; 11 Main Street.

LEVINSON, RONALD BARTLETT (1926); A.B., Harvard, 1919; Ph.D., Chicago, 1924; Professor and Head of Department of Philosophy, College of Arts and Sciences, member of Graduate Faculty; 335 Stevens; 78 North Main Street.

LIBBY, WINTHROP CHARLES (1934); B.S., Maine, 1932; M.S., 1933; Assistant Professor of Agronomy, College of Agriculture; 2 Agricultural Engineering Building; 33 Main Street.

LORING, FRED PERLEY (1934); B.S., Maine, 1916; M.S., 1936; Director of Short Courses, College of Agriculture; 11 Winslow; 79 Bennoch Street.

LOUPRET, GEORGE JOSEPH (1936); Captain, Coast Artillery Corps (D.O.L.), U. S. Army; Assistant Professor of Military Science and Tactics; Armory; University Place.

LUCAS, WARREN STANHOPE (1922); B.A., Maine, 1914; M.A., 1922; Assistant Professor of Mathematics, College of Arts and Sciences; 120 Stevens; Stillwater.

LUTES, OLIN SILAS (1926); A.B., Ohio University, 1915; M.A., State University of Iowa, 1923; Ph.D., 1926; Dean of the School of Education and Professor of Education, member of Graduate Faculty; 24 Stevens, South; College Road.

LYON, ALPHEUS CROSBY (1912); B.S., Maine, 1902; S.B., Massachusetts Institute of Technology, 1904; C.E., Maine, 1913; Associate Professor of Civil Engineering, College of Technology; 3 Wingate; 735 Main Street, Bangor.

MCCARTHY, CECILIA AGNES (1937); S.B., Simmons, 1917; A.M., Columbia, 1935; Assistant Professor of Home Economics, College of Agriculture; 15a Merrill; 43 Main Street.

McNeary, Matthew (1937); B.S., Pennsylvania State, 1932; Instructor in Engineering Drafting, College of Technology; 41 Wingate; 23 Spencer Lane.

McReynolds, George Edgar (1935); A.B., Indiana, 1931; A.M., 1932; Ph.D., Clark, 1937; Instructor in History and Government, College of Arts and Sciences; 350 Stevens; 66 College Road.

Martin, Frederic Thurman (1934); Ch.E., Lehigh, 1925; Ph.D., Johns Hopkins, 1929; Instructor in Chemistry, College of Technology; 207 Aubert; 7 Pleasant Street.

Mendall, Howard Lewis (1937); B.A., Maine, 1931; M.A., 1934; Instructor in Game Management, College of Agriculture; 9 Coburn; 28 Pendleton Street, Brewer.

Merchant, Charles Henry (1924); B.S., Cornell University, 1920; M.S., 1922; Ph.D., 1928; Professor and Head of Department of Agricultural Economics and Farm Management, College of Agriculture, member of Graduate Faculty; 36 Winslow; 39 Mill Street.

Meyer, Eugene Clarence (1938); B.S., (Agri.) Wisconsin, 1932; B.S., (Eng.) 1933; M.S., 1936; Assistant Professor of Agricultural Engineering, College of Agriculture; 22 Agricultural Engineering Building; 48 Main Street.

Miles, Edwin Kenneth (1933); B.A., Lawrence, 1929; M.A., Northwestern, 1930; Ph.D., University of Pennsylvania, 1933; Assistant Professor of German, College of Arts and Sciences; 320 Stevens; 54 Pine Street.

Miller, Joseph William (1938); B.A., Cornell University, 1935; M.A., 1938; Instructor in Public Speaking, College of Arts and Sciences; 330 Stevens; 37 Pine Street.

Morrow, Rising Lake (1934); B.A., Wesleyan, 1923; A.M., Harvard, 1925; Ph.D., 1932; Assistant Professor of History and Government, College of Arts and Sciences, member of Graduate Faculty; 150 Stevens; 66 College Road.

Murray, Joseph Magee (1934); B.A., Maine, 1925; M.A., University of Michigan, 1927; Ph.D., 1929; Professor and Head of Department of Zoology, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 16 Coburn; 184 Main Street.

Musgrave, Marguerite Ruth (1929); B.S., Columbia, 1925; A.M., 1926; Assistant Professor of Home Economics, College of Agriculture; 31a Merrill; 33 Main Street.

Nelson, Elven Clifford (1933); B.A., University of Colorado, 1929; M.A., 1930; Sc.D., Johns Hopkins, 1933; Assistant Professor of Zoology, College of Arts and Sciences; 14 Coburn; 86 North Main Street.

NESBITT, MARGARET KATHERINE (1938); B.A., Ohio State University, 1930; M.A., 1931; Assistant Professor of Home Economics, College of Agriculture; 11a Merrill; 33 Bennoch Street.

NIEDERFRANK, EVLON JOY (1935); B.S., Oregon State College, 1932; M.S., 1935; Assistant Professor of Agricultural Economics and Farm Management, College of Agriculture; 35 Winslow; 23 Crosby Street.

NOLAN, WILLIAM JOHN (1938); Ch.E., Rensselaer Polytechnic Institute, 1929; Ph.D., University of Michigan, 1936; Associate Professor of Chemical Engineering, College of Technology; 115 Aubert; 169 Center Street, Bangor.

OGDEN, EUGENE CECIL (1938); B.S., Michigan State, 1932; M.S., Maine, 1934; A.M., Harvard, 1936; Ph.D., 1938; Instructor in Botany, College of Agriculture; 36 Coburn; 22 University Place.

OSBORN, LAWRENCE LEWIS (1928); A.B., Indiana, 1924; A.M., 1927; Instructor in Chemistry, College of Technology; 229 Aubert; 14 Middle Street.

OTTO, CARL EVERETT (1924); B.A., Cincinnati, 1916; M.A., 1920; Ph.D., 1922; Associate Professor of Chemistry, College of Technology; 421 Aubert; 430 College Road.

PEDLOW, JOHN THOMAS (1936); B.S., Pennsylvania State, 1925; M.S., Rutgers, 1926; Ph.D., Pennsylvania State, 1934; Assistant Professor of Biochemistry, College of Agriculture; 15 Winslow; 20 Myrtle Street.

PERKINS, HARRY ROY (1917); Instructor in Mechanical Engineering, College of Technology; Mechanical Shops; Spring Street, Stillwater.

PETERSON, ROY MERLE (1918); A.B., Coe, 1906; A.M., Harvard, 1910; Ph.D., 1912; F.A.A.R.; Professor and Head of Department of Romance Languages, College of Arts and Sciences, Director of the Summer Session, Catalog Editor, Acting Dean of Graduate Faculty and coöperating member of the faculty of the School of Education; 3 Stevens, North; 29 Bennoch Street.

PRAGEMAN, IRVING HENRY (1927); Ph.B., Yale, 1918; M.E., 1923; Assistant Professor of Mechanical Engineering, College of Technology; 14 Lord; 58 Main Street.

QUINN, JOHN BRECHEMIN (1938); B.S., Maine, 1934; Instructor in Forestry, College of Agriculture; 26 Winslow; Stillwater.

RALEIGH, STEPHEN MARTIN (1934); B.S., Kansas State College, 1927; Ph.D., Minnesota, 1934; Assistant Professor of Agronomy, College of Agriculture; 2 Agricultural Engineering Building; 150 Park Street.

REYNOLDS, CECIL JOHN (1935); B.Sc., Mount Allison, 1926; B.A., 1927; B.A., Oxford, 1929; B.Litt., 1930; A.M., Harvard, 1932; Instructor in English, College of Arts and Sciences; 345 Stevens; 5 Forest Avenue.

RILEY, RICHARD MCVAY (1929); B.S., Ohio University, 1926; M.S., Cornell University, 1929; Assistant Professor of Horticulture, College of Agriculture; Horticulture Greenhouse; Stillwater.

RINKAUS, JOSEPH JAMES (1935); Sergeant (D.E.M.L.), U. S. Army; Instructor in Military Science and Tactics; Armory; 51 North Main Street.

ROBERTS, EVERETT LOUIS (1921); B.S., Maine, 1920; Assistant Professor of Electrical Engineering, College of Technology; 3 Lord; 4 Summer Street.

ROGERS, MARION ELIZABETH (1927); Diploma, Sargent School for Physical Education, 1927; B.A., Maine, 1930; M.A., 1936; Assistant Professor of Physical Education for Women; Alumni; 57 College Road.

ROY, JOSEPH ABEL (1936); Sergeant (D.E.M.L.), U. S. Army; Instructor in Military Science and Tactics; Armory; Spring Street, Stillwater.

RUNION, HOWARD LUCIUS (1936); A.B., University of Michigan, 1931; M.A., 1932; Ph.D., 1936; Assistant Professor of Public Speaking, College of Arts and Sciences; 240 Stevens; 15 Pond Street.

SANDERLIN, GEORGE WILLIAM (1938); B.A., American University, 1935; Ph.D., Johns Hopkins, 1938; Instructor in English, College of Arts and Sciences, 345 Stevens; 36 Main Street.

SAWYER, RALPH ALBERT (1929); B.S., Norwich, 1925; Assistant Professor of Engineering Drafting, College of Technology; 41 Wingate; 19 Oak Street.

SCAMMAN, WILLIAM FRANCIS (1926); B.A., Maine, 1908; M.A., 1930; Assistant Professor of English, College of Arts and Sciences; 245 Stevens; 84 College Road.

SMALL, GEORGE WILLIAM (1929); B.A., Tennessee, 1915; M.A., Johns Hopkins, 1921; Ph.D., 1922; B.Litt., Oxford, 1927; Professor of English, College of Arts and Sciences, member of Graduate Faculty; 250 Stevens; 15 Pleasant Street.

SMITH, HARRY WOODBURY (1912); B.S., Maine, 1909; M.S., 1922; Ph.D., Rutgers, 1934; Professor of Biochemistry, College of Agriculture, member of Graduate Faculty; 15 Winslow; 382 College Road.

SMITH, LESLIE FRANCIS (1938); M.A., Glasgow University, 1926; A.M., Columbia, 1929; Assistant Professor of Classics, College of Arts and Sciences, member of Graduate Faculty and coöperating member of the faculty of the School of Education; 110 Stevens; 102 North Main Street.

SMYTH, JOHN ROBERT (1929); B.S., Purdue, 1920; M.S., Kentucky, 1928; Professor of Poultry Husbandry, College of Agriculture; Poultry Building; 50 College Road.

SNYDER, MARY ELLA (1936); A.B., Gooding College, 1919; M.S., Iowa State College, 1936; Instructor in Home Economics, College of Agriculture; 25a Merrill; 69 Bennoch Street.

Sparrow, Theron Alonzo (1926); B.S., Maine, 1924; M.S., 1938; Assistant Professor of Mechanical Engineering, College of Technology; 14 Lord; 100 Main Street.

Speicher, Benjamin Robert (1937); A.B., Denison, 1929; M.S., Pittsburgh, 1931; Ph.D., 1933; Assistant Professor of Zoology, College of Arts and Sciences; 23 Coburn; 104 North Main Street.

Sprague, Adelbert Wells (1916); B.S., Maine, 1905; A.M., Harvard, 1907; Professor and Head of Department of Music, College of Arts and Sciences; 15 Stevens, North; 217 Union Street, Bangor.

Sprague, Embert Hiram (1915); B.S., Dartmouth, 1900; Professor of Sanitary Engineering, College of Technology, member of Graduate Faculty; 21 Wingate; 180 Main Street.

Starr, Wilmarth Holt (1937); B.A., Wesleyan, 1934; Ph.D., Johns Hopkins, 1937; Instructor in Romance Languages, College of Arts and Sciences; 9 Stevens, North; 47 Forest Avenue.

Steinbauer, George Peter (1929); B.S., Minnesota, 1925; M.S., 1927; Ph.D., 1929; Associate Professor of Botany, College of Agriculture; 8 Coburn; 66 College Road.

Steinmetz, Ferdinand Henry (1927); B.S., Illinois, 1915; M.S., Minnesota, 1921; Ph.D., 1926; Professor and Head of Department of Botany and Entomology, College of Agriculture, member of Graduate Faculty; 24 Coburn; 36 College Road.

Stephenson, Leonidas Dacosta, Jr., (1929); B.S., North Carolina State College, 1927; Instructor in Civil Engineering, College of Technology; 11 Wingate; 195 Middle Street, Old Town.

Stewart, John Emmons (1928); B.A., Maine, 1927; M.A., 1928; Assistant Professor of Mathematics, College of Arts and Sciences; 140 Stevens; 136 Middle Street, Old Town.

Stormann, Charles Linwood (1937); Technician, Department of Physics, College of Arts and Sciences, Departments of Chemistry and Chemical Engineering, and Civil Engineering, College of Technology; 102 Aubert; Spring Street, Stillwater.

Sweetman, Marion Deyoe (1927); B.S., Iowa State College, 1921; M.S., 1922; Ph.D., Minnesota, 1927; Professor of Home Economics, College of Agriculture, member of Graduate Faculty; 25 Merrill; 6 North Main Street.

Sweetser, William Jordan (1915); S.B., Massachusetts Institute of Technology, 1901; Professor and Head of Department of Mechanical Engineering, College of Technology, member of Graduate Faculty; 1 Lord; 109 Main Street.

SWIFT, HAROLD CLAYTON (1920); B.S., Maine, 1918; M.S., 1923; Assistant Professor of Agronomy and Agricultural Engineering, College of Agriculture; 22 Agricultural Engineering Building; 40 Wiley Street, Bangor.

*TOMLIN, WILBUR EVERETT (1930); A.B., Kentucky Wesleyan, 1926; A.M., Columbia, 1931; Instructor in Chemistry, College of Technology; 213 Aubert; 56 Forest Avenue.

TREFETHEN, JOSEPH MUZZY (1938); A.B., Colby, 1931; M.S., University of Illinois, 1932; Ph.D., Wisconsin, 1935; Instructor in Geology, Department of Civil Engineering, College of Technology; 2 Fernald; 24 Forest Avenue.

TURNER, ALBERT MORTON (1922); A.B., Harvard, 1912; A.M., 1914; Ph.D., 1920; Professor of English and Comparative Literature, College of Arts and Sciences, member of Graduate Faculty; 235 Stevens; 154 College Road.

VIGNERAS, LOUIS-ANDRÉ (1936); B. ès L., Université de Poitiers, 1920; B.A., Princeton, 1921; M.A., 1922; Ph.D., Harvard, 1934; Assistant Professor of Romance Languages, College of Arts and Sciences; 9 Stevens, North; 4 Myrtle Street.

WALLACE, STANLEY MOORE (1922); Diploma, New Haven Normal School of Gymnastics, 1917; Professor and Head of Department of Physical Education; Memorial Gymnasium; 45 Park Street.

WARING, JAMES HOWARD (1925); B.S., Pennsylvania State, 1920; M.S., 1921; Ph.D., Michigan State College, 1930; Professor and Head of Department of Horticulture, College of Agriculture, member of Graduate Faculty; Horticulture Greenhouse; 24 University Place.

WATSON, HARRY DEXTER (1920); B.S., Maine, 1920; M.S., 1929; Professor of Mechanical Engineering, College of Technology; 16 Lord; University Place.

WENCE, MILFORD EDWARD (1937); B.A., State University of Iowa, 1933; M.A., 1934; Ph.D., 1937; Instructor in English, College of Arts and Sciences; 220 Stevens; 46 College Road.

WESTON, CHARLES PARTRIDGE (1898); B.C.E., Maine, 1896; C.E., 1899; A.M., Columbia, 1902; Professor and Head of Department of Mechanics, College of Technology, 1 Fernald; College Road.

WHITE, HOWARD RAWSON (1937); B.A., Buffalo, 1932; M.A., 1933; Ph.D., State University of Iowa, 1936; Instructor in Psychology, College of Arts and Sciences; 39 Stevens, North; 43 Main Street.

WHITMORE, ALBERT AMES (1918); B.S., Maine, 1906; M.A., 1917; Associate Professor of History and Government, College of Arts and Sciences; 150 Stevens; 31B Mill Street.

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*On leave of absence, 1938-39.

WHITNEY, WALTER REGINALD (1928); B.S., Bowdoin, 1923; A.M., Harvard, 1935; Assistant Professor of English, College of Arts and Sciences; 245 Stevens; 106 North Main Street.

WILLARD, HARLEY RICHARD (1904); A.B., Dartmouth, 1899; A.M., 1902; A.M., Yale, 1910; Ph.D., 1912; Professor and Head of Department of Mathematics and Astronomy, College of Arts and Sciences, member of Graduate Faculty, and coöperating member of the faculty of the School of Education; 130 Stevens; 100 Bennoch Street.

WILLIAMS, ARTHUR OLNEY, JR. (1937); S.B., Massachusetts Institute of Technology, 1934; S.M., Brown, 1936; Ph.D., 1937; Instructor in Physics, College of Arts and Sciences; 314 Aubert; 75 Forest Avenue.

WILSON, EDITH GRACE (1931); B.A., Southern California, 1923; M.A., 1928; Instructor in Economics and Sociology, College of Arts and Sciences, Dean of Women; 16 Stevens, South; 6 North Main Street.

WILSON, EVELYN FAYE (1933); A.B., Beloit, 1921; M.A., University of Washington, 1924; Ph.D., California, 1930; Associate Professor of History and Government, College of Arts and Sciences, member of Graduate Faculty; 175 Stevens; 56 Main Street.

WITTER, JOHN FRANKLIN (1932); B.S., Maryland, 1928; D.V.M., Michigan State College, 1932; Assistant Professor of Animal Pathology, College of Agriculture; Poultry Building; 66 College Road.

BRUSH, LILLIAN HATFIELD; B.A., Lake Forest, 1923; M.A., Illinois, 1924; Ph.D., Cornell University, 1928; Lecturer in Psychology, College of Arts and Sciences; 39 Stevens, North; 391 College Road.

TURNER, PERCIE HOPKINS; A.B., Smith, 1917; A.M., 1920; A.M., Radcliffe, 1923; Ph.D., 1924; Lecturer in English, College of Arts and Sciences; 154 College Road.

BROWN, ALICE LOWE; A.B., Colby, 1899; Critic Teacher, School of Education; Old Town High School; 26 North Fourth Street, Old Town.

*COLBATH, GERALDINE LUCILLE; A.B., Colby, 1933; Critic Teacher, School of Education; Orono High School; 9 Pine Street.

CROXFORD, HORACE ALCANDER; B.A., Maine, 1930; Instructor and Critic Teacher, School of Education; Orono High School; 35 Myrtle Street.

GRANT, GRACE STETSON; A.B., Colby, 1907; A.M., Middlebury, 1935; Critic Teacher, School of Education; Orono High School; 80 Pine Street.

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*Resigned, December 31, 1938.

MERRILL, ROBERT BATES; A.B., Colby, 1936; Critic Teacher, School of Education; Old Town High School; Somerset Street, Old Town.

*LOUISE BROOKES MILLER, B.A., Bethany, 1931; Critic Teacher, School of Education, Orono High School; 46 Kenduskeag Avenue, Bangor.

MUTTY, MARIE JOSEPHINE; B.A., Maine, 1933; Critic Teacher, School of Education; Old Town High School; 60 Fourth Street, Old Town.

ROBINSON, VEYSEY HIRAM; B.Ped., Maine, 1917; Instructor and Critic Teacher, School of Education; Old Town High School; 183 Stillwater Avenue, Old Town.

SIMMONS, DANA MAXWELL; B.S., Colby, 1931; Critic Teacher, School of Education; Orono High School; 34 Forest Avenue.

ANDERSON, FRANK ABEL; B.S., Southern California, 1936; Graduate Assistant, Department of Chemistry and Chemical Engineering, College of Technology; 303 Aubert; 43 Peters Street.

BLACKMER, LEROY LEWIS, JR., B.S., Massachusetts State, 1937; Graduate Fellow in Physics, College of Arts and Sciences; 406 Aubert; Kappa Sigma.

CARTER, NELSON BRADFORD; B.S., Maine, 1938; Graduate Assistant, Department of Chemistry and Chemical Engineering, College of Technology; 303 Aubert; 12 Brimmer Street, Brewer.

DIKE, KENNETH WILCOX; B.S., Vermont, 1936; Graduate Fellow in Animal Pathology, College of Agriculture; Poultry Building; 25 Myrtle Street.

DURICK, ROSEMARY BEATRICE; B.A., University of New Brunswick, 1938; Graduate Assistant, Department of Zoology, College of Arts and Sciences; 30 Coburn; 36 College Road.

ELLINGSON, ALBERT MARTIN; B.S., Maine, 1938; Assistant, Department of Mechanical Engineering, College of Technology; Mechanical Shops; Phi Eta Kappa.

ELLIS, GILMAN CLENDENEN; A.B., Bowdoin, 1935; Graduate Assistant, Department of Zoology, College of Arts and Sciences; 25 Coburn; 107 Main Street.

FRY, JAMES HOWARD; B.S., Pennsylvania State, 1938; Graduate Fellow in Biochemistry, College of Agriculture; 15 Winslow; 4 Myrtle Street.

GASHWILER, JAY SCHOOLING; B.S., Oregon State, 1937; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 95 Mill Street.

GORHAM, PAUL RAYMOND; B.A., University of New Brunswick, 1938; Graduate Fellow in Botany, College of Agriculture; 26 Coburn; 37 Pine Street.

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*Appointed, January 1, 1939.

Hobson, Maebelle Alberta; B.S., Bates, 1937; Graduate Fellow in Mathematics, College of Arts and Sciences; 135 Stevens; Colvin Hall.

Johnson, Robert Holm; B.S., Idaho, 1937; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 95 Mill Street.

Kelly, Donald Hoyt; B.S., New Hampshire, 1938; Graduate Assistant, Department of Chemistry and Chemical Engineering, College of Technology; 303 Aubert; 43 Peters Street.

Kroll, Henry Michael; A.B., Clark, 1938; Graduate Assistant, Department of Zoology, College of Arts and Sciences; 25 Coburn; 80 Forest Avenue.

*Lamson, Arroll Liscomb; B.S., Connecticut State, 1933; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 56 Forest Avenue.

Lendo, Alexander Chester; B.S., Worcester Polytechnic, 1932; Assistant in the Department of Civil Engineering, College of Technology; 11 Wingate; 225 Main Street.

Linden, Carl Arthur; B.S., Tufts, 1936; Graduate Assistant, Department of Engineering Drafting, College of Technology; 41 Wingate; 27 Myrtle Street.

Mansfield, Agnes Lucy, B.A., Smith College, 1938; Graduate Assistant, Department of Zoology, College of Arts and Sciences; 30 Coburn; 60 Park Street.

Montgomery, Robert Dudley; B.S., Minnesota, 1937; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 80 Forest Avenue.

Mundt, John Orvin; B.S., Wisconsin, 1938; Graduate Fellow in Bacteriology, College of Agriculture; 23 Winslow; 25 Myrtle Street.

Oleson, Frederick Barbour; A.B., Colby, 1938; Graduate Fellow in Physics, College of Arts and Sciences; 406 Aubert; 158 Main Street.

Philbrook, George Edwin; B.S., Maine, 1938; Graduate Assistant, Department of Chemistry and Chemical Engineering, College of Technology; 303 Aubert; 43 Peters Street.

Pope, Donald Bartlett; B.S., University of Illinois, 1938; Graduate Fellow in Dairy Husbandry, College of Agriculture; 28 Rogers; 25 Myrtle Street.

Saveraid, Joye Harold; B.S., Iowa State, 1938; Graduate Assistant in Wildlife Conservation, College of Agriculture; 9 Coburn; 25 Grove Street.

Todd, Frank Harold; B.S., Bowdoin, 1935; M.A., Maine, 1936; Assistant, Department of Mathematics, College of Arts and Sciences; 125 Stevens; R.F.D. #7, Bangor.

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*Resigned, December 5, 1938.

WOODBURY, HAROLD MACE; B.S., Maine, 1937; Graduate Fellow, Department of Physical Education; Memorial Gymnasium; 53 North Main Street.

ZIEMER, CHARLES WALTER; B.S., Utah State Agricultural College, 1938; Graduate Assistant, Department of Chemistry and Chemical Engineering, College of Technology; 303 Aubert; 18 Penobscot Street.

Maine Agricultural Experiment Station

COUNCIL

Arthur Andrew Hauck, Ph.D., LL.D.	*President*
Fred Griffee, Ph.D.	*Secretary*
Thomas Edward Houghton, Fort Fairfield	*Committee*
John Thomas Gyger, M.S., Portland	*of*
*Frank Porter Washburn, Augusta	*Trustees*
Arthur Lowell Deering, Sc.D.	*Dean of the College of Agriculture and Director, Extension Service*
Allen Prince Howes, R.F.D. 2, Pittsfield	*State Grange*
Wilson Hiram Conant, Buckfield	*State Pomological Society*
Fred Jewett Nutter, Corinna	*State Dairymen's Association*
William George Hunton, Portland	*Honorary Member*
Ross Elliott, East Corinth	*Maine Livestock Breeders' Association*
Charles Conant Clements, Winterport	*Maine Poultry Improvement Association*

Elmer Robert Tobey, Ch.E.	*Members of the Station Staff*
Donald Folsom, Ph.D.	
Charles Henry Merchant, Ph.D.	
Pearl Stuart Greene, A.M.	
William Franklin Dove, Ph.D.	
Frank Heidtman Lathrop, Ph.D.	
Charles Harry White, Ph.C.	
Reiner Bonde, Ph.D.	
George Farrington Dow, Ph.D.	
Marion Deyoe Sweetman, Ph.D.	
Joseph Anthony Chucka, Ph.D.	
Frederick Barker Chandler, B.S.	
Russell Manley Bailey, B.S.	
Mary Morris Clayton, Ph.D.	
Bernie Elliott Plummer, Jr., M.S.	
Delmar Simon Fink, Ph.D.	
John Henry Hawkins, Ph.D.	

*Also a member of the Council ex officio as Commissioner of Agriculture.

Faculty of Investigation

ARNO, JOHN RAYMOND, Assistant Soil Surveyor
B.S., Maine, 1936; M.S., 1938.

AVERILL, ALICE WOOD, Laboratory Assistant in Entomology.

BAILEY, DEAN MANTER, Graduate Fellow in Plant Breeding.
B.S., Maine, 1936; M.S., 1938.

BAILEY, RUSSELL MANLEY, Associate Geneticist.
B.S., Maine, 1928.

BARNES, RONALD EUGENE, Coöperative Agent, Soil Conservation Service.
B.S., Maine, 1938.

BONDE, REINER, Associate Plant Pathologist.
B.S., Minnesota, 1922; M.S., Maine, 1926; Ph.D., Minnesota, 1938.

*BOUCHARD, ANNA SZULINSKI, Assistant in Agricultural Economics.

BOWERS, RUTH WILMA, Assistant in Seed Analysis and Laboratory Assistant in Plant Pathology.

BRAUTLECHT, CHARLES ANDREW, Collaborating Chemist.
Ph.B., Yale, 1906; Ph.D., 1912.

BURGESS, IVA MERCHANT, Assistant Geneticist.
B.S., Maine, 1923; M.S., 1925.

CHADWICK, FRANK, JR., Assistant, Animal Breeding.
B.S., Maine, 1936.

CHANDLER, FREDERICK BARKER, Associate Physiologist in Charge of Blueberry Investigations.
B.S., Maine, 1928.

CHUCKA, JOSEPH ANTHONY, Agronomist.
B.S., Wisconsin, 1927; M.S., 1928; Ph.D., 1930.

CLAYTON, MARY MORRIS, Nutritionist.
B.S., Columbia, 1918; M.S., Rochester, 1926; Ph.D., 1929.

COTTER, MARGUERITE LILLIAN, Laboratory Assistant in Biology.

COVELL, MILDRED REBECCA, Assistant Statistician.

DOVE, WILLIAM FRANKLIN, Biologist.
B.S., Iowa State College, 1922; M.S., Wisconsin, 1923; Ph.D., 1927.

DOW, GEORGE FARRINGTON, Associate Agricultural Economist.
B.S., Maine, 1927; M.S., 1929; Ph.D., Cornell University, 1938.

FINK, DELMAR SIMON, Associate Agronomist.
B.S., Wisconsin, 1930; M.S., 1931; Ph.D., 1934.

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*Resigned, January 21, 1937.

Folsom, Donald, Plant Pathologist.
A.B., Nebraska, 1912; M.A., Minnesota, 1914; Ph.D., 1917.
Greene, Pearl Stuart, Home Economist.
B.A., Northwestern, 1909; B.S., Lewis Institute, 1914; A.M., Columbia, 1923.
Griffee, Fred, Director.
B.S., Kansas State College, 1919; M.S., Minnesota, 1920; Ph.D., 1924.
Griffin, Carol Howe, Assistant in Biology.
A.B., Agnes Scott College, 1935.
Hawkins, Arthur, Assistant Agronomist.
B.S., Rutgers, 1934; M.S., 1936.
Hawkins, John Henry, Associate Entomologist.
B.S., Illinois, 1926; M.S., Maine, 1927; Ph.D., Cornell University, 1935.
Hilborn, Merle Tyson, Assistant Plant Pathologist.
B.S., Maine, 1932; M.S., 1934.
Inman, Charles Clyde, Administrative Assistant.
Kenney, Emmeline Wilson, Laboratory Assistant in Biology.
Lathrop, Frank Heidtman, Entomologist.
B.S., Clemson, 1913; M.S., Ohio State, 1915; Ph.D., 1923.
Lovejoy, Delmar Boynton, Assistant Soil Surveyor.
B.S., Maine, 1928; M.S., Wisconsin, 1935.
Mason, Irvin Carroll, Assistant in Physiology, Blueberry Investigations.
B.S., Maine, 1930; M.S., 1932.
Merchant, Charles Henry, Agricultural Economist.
B.S., Cornell University, 1920; M.S., 1922; Ph.D., 1928.
Monroe, Merna Myrtha, Assistant in Home Economics Research.
B.S., Iowa State College, 1929; M.S., Kansas State College, 1932.
Moore, Millard George, Assistant Chemist and Associate Bacteriologist.
B.S., Maine, 1919; M.S., 1930.
Murphy, Elizabeth Florence, Assistant in Biology.
B.A., Maine, 1930; M.A., 1934.
Perkins, Glenn Harold, Assistant Chemist.
B.S., Maine, 1930; M.S., 1931.
Plummer, Bernie Elliott, Jr., Associate Chemist.
B.S., Maine, 1924; M.S., 1925.
Pooler, Elaine Mary, Chief Assistant in Agricultural Economics.
Rich, Avery Edmund, Graduate Fellow in Plant Pathology.
B.S., Maine, 1937.
Schrumpf, William Ernest, Assistant Agricultural Economist.
B.S., Maine, 1928; M.S., 1930.

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*Resigned, October 31, 1938.

SIMPSON, GEDDES WILSON, Assistant Entomologist.
A.B., Bucknell, 1929; A.M., Cornell University, 1931; Ph.D., 1935.
SMITH, LESTER HURLIN, Assistant in Agronomy.
B.S., Maine, 1937.
STEINBAUER, GEORGE PETER, Seed Analyst, Department of Inspections.
B.S., Minnesota, 1925; M.S., 1927; Ph.D., 1929.
SWEETMAN, MARION DEYOE, Collaborating Home Economist.
B.S., Iowa State College, 1921; M.S., 1922; Ph.D., Minnesota, 1927.
SZULINSKI, SOPHIE, Assistant in Agricultural Economics.
THORNTON, MARJORIE BERYL, Assistant in Agricultural Economics.
TOBEY, ELMER ROBERT, Chemist.
B.S., Maine, 1911; M.S., 1917; Ch.E., 1920.
WATSON, ANDREW ELWELL, Assistant Agricultural Economist.
B.S., Maine, 1934; M.S., 1936.
WHITE, CHARLES HARRY, Associate Chemist and Photographer.
Ph.C., Maine, 1899.
WILLIAMS, GERALDINE FRANKLYN, Assistant in Agricultural Economics.

MAINE TECHNOLOGY EXPERIMENT STATION

Board of Control

Paul Cloke, E.E., Eng.D.....Director
Harold Walter Leavitt, C.E., M.S.....Secretary
William Francis Scamman, M.A.....Editor of Publications
Wilber Elmore Bradt, Ph.D.....
.....Department of Chemistry and Chemical Engineering
Weston Sumner Evans, M.S.....Department of Civil Engineering
William Edward Barrows, B.S., E.E...Department of Electrical Engineering
William Jordan Sweetser, S.B.....Department of Mechanical Engineering
Paul DeCosta Bray, B.S., Ch.E...Department of Pulp and Paper Technology

Members of the Station Staff

William Edward Barrows, B.S., E.E., Professor of Electrical Engineering
Earl Freeman Bennett, S.M., Research Assistant on Soils
Robert Bruce Bradford, B.S., Highway Laboratory Assistant
Wilber Elmore Bradt, Ph.D., Professor of Chemistry
Charles Andrew Brautlecht, Ph.D., Professor of Chemistry and Chemical Engineering
Paul DeCosta Bray, B.S., Ch.E., Professor of Pulp and Paper Technology
Paul Cloke, E.E., Eng.D., Director, Dean of the College of Technology, and Professor of Electrical Engineering
Walter Joseph Creamer, B.S., E.E., B.A., Professor of Communication Engineering
Weston Sumner Evans, M.S., Professor of Civil Engineering
William Lester Gilliland, Ph.D., Assistant Professor of Chemistry
Arthur St. John Hill, M.S.E., E.E., Professor of Electrical Engineering
Lyle Clayton Jenness, M.S., Associate Professor of Chemistry
Harold Walter Leavitt, C.E., M.S., Secretary and Professor of Highway Engineering
Carl Everett Otto, Ph.D., Associate Professor of Chemistry
Horace Asa Pratt, M.S., Assistant Engineer
Clayton Leonard Sawyer, B.A., Highway Laboratory Assistant
William Francis Scamman, M.A., Editor of Bulletins and Assistant Professor of English
Theron Alonzo Sparrow, M.S., Assistant Professor of Mechanical Engineering
Embert Hiram Sprague, B.S., Professor of Sanitary Engineering

JOHN H. SWEATT, B.S., Bituminous Chemist for the State Highway Commission

WILLIAM JORDAN SWEETSER, S.B., Professor of Mechanical Engineering

JOSEPH MUZZY TREFETHEN, Ph.D., Instructor in Geology in the Department of Civil Engineering

Faculty of Extension Service

(COLLEGE OF AGRICULTURE)

ARTHUR LOWELL DEERING, Director.
B.S., Maine, 1912; Sc.D., 1934
GEORGE EDGAR LORD, Assistant Director.
B.S., Maine, 1924

STATE AGENTS

RAYMON NEALE ATHERTON, Extension Economist, Marketing.
B.S., Maine, 1918
EDNA MANSFIELD COBB, Home Management Specialist.
S.B., Simmons, 1916
RALPH ASHTON CORBETT, Assistant Dairy Specialist.
B.S., Maine, 1930
LEONE MAE DAKIN, Foods Specialist.
B.S., Maine, 1926
CLARENCE ALBERT DAY, Extension Editor.
M.S., Maine, 1929
RICHARD CARLTON DOLLOFF, County Agent Leader.
B.S., Maine, 1927
ALBERT KINSMAN GARDNER, Crops Specialist.
B.S., Maine, 1910
MILON GEORGE HUBER, Extension Agricultural Engineer.
B.S., Wisconsin, 1929; B.S., 1932
KENNETH COUSINS LOVEJOY, State Club Leader.
B.S., Maine, 1928
SMITH CHARLES MCINTIRE, Extension Economist, Farm Management.
B.S., Maine, 1932.
STACY ROSS MILLER, Extension Economist, Farm Management.
B.S., Maine, 1932.
BRUCE BEAR MINER, Assistant Extension Editor.
B.S., Cornell University, 1935
WENDALL EARL MOSHER, Executive Secretary to Director of Extension.
B.S., Maine, 1929
ESTELLE NASON, State Home Demonstration Agent Leader.
B.S., Maine, 1922

ALBERT DEANE NUTTING, Forestry Specialist.
B.S., Maine, 1927
EVELYN MARIE PLUMMER, Assistant State Club Leader.
B.S., Maine, 1933.
DONALD WINSLOW REED, Extension Economist, Marketing.
B.S., Maine, 1922
FRANK DUDLEY REED, Poultry Specialist.
B.S., New Hampshire, 1929
HELEN CONSTANCE SPAULDING, Clothing Specialist.
B.S., Simmons, 1913
RICHARD FOSTER TALBOT, Dairy Specialist.
B.S., Maine, 1907
OSCAR LEWIS WYMAN, Assistant Crops Specialist.
B.S., Maine, 1926

COUNTY AGENTS

VERNE CURTIS BEVERLY, Aroostook County.
B.S., Maine, 1920
RICHARD FRANCIS BLANCHARD, Oxford County.
B.S., Maine, 1931
CHARLES LESLIE EASTMAN, Androscoggin and Sagadahoc Counties.
B.S., Maine, 1922
FRANK WILBUR HAGAN, Somerset County.
B.S., Maine, 1933
RALPH WILLIAM HOBSON, Washington County.
B.S., Maine, 1925
JOHN WINSTON HOYT, Franklin County.
B.S., Maine, 1935
BRYCE MEREDITH JORDAN, Assistant County Agent, Aroostook County.
B.S., Maine, 1926
RAYMOND HARWOOD LOVEJOY, York County.
B.S., Maine, 1918
WESLEY SPAULDING NORTON, Kennebec County.
B.S., Maine, 1935
PHILIP STEWART PARSONS, Waldo County.
B.S., Maine, 1934
WILLIAM SLOAN PLUMER, District County Agent, Cumberland and York Counties.
B.S., Ohio State, 1936
COLEMAN CEDRIC RANDALL, Assistant County Agent, Penobscot County.
B.S., Maine, 1933

Lewis Pollard Roberts, Piscataquis County.
B.S., Maine, 1931
Wilfred Sherman Rowe, Cumberland County.
Melzor Stetson Smith, Penobscot County.
B.S., Maine, 1931
Gardner Berry Tibbetts, Hancock County.
B.S., Maine, 1922
Ralph Carlton Wentworth, Knox and Lincoln Counties.
B.S., Maine, 1918

Home Demonstration Agents

Hortense Bradbury, Washington County.
B.S., Maine, 1935
Pauline Smith Budge, Somerset County.
B.S., Maine, 1935
Ruth Isabel Callaghan, Oxford County.
B.S., Maine, 1933
Frances Cisar, Piscataquis County.
B.S., South Dakota State College, 1928
Charlotte Elizabeth Cleaves, Penobscot County.
B.S., Maine, 1931
Esther Louise Dunham, Knox and Lincoln Counties.
B.S., Framingham Normal, 1933
Agnes Freyer Gibbs, Cumberland County.
B.S., Framingham Normal, 1926
Barbara Higgins, Waldo County.
B.S., Maine, 1930
Jessie Mildred Lawrence, Aroostook County.
B.S., Maine, 1928
Jeannette Linton, Kennebec County.
S.B., Simmons, 1937
Gladys Winnifred Marble, York County.
S.B., Simmons, 1919
Ada Mildred Rogers, Hancock County.
B.S., Farmington Normal, 1934
Elizabeth Tryon, Franklin County.
B.S., Maine, 1933
Mary Louise Wright, Androscoggin and Sagadahoc Counties
B.S., Maine, 1938

County Club Agents

Rachel Louise Adams, Aroostook County.
B.S., Maine, 1934

Hope Elizabeth Ashby, Cumberland County.
B.S., Maine, 1937

Spurgeon Kearney Benjamin, Waldo County.
B.S., Maine, 1935

Earle Theodore Blodgett, York County.
B.S., Maine, 1927

Lucy Margaret Cobb, Penobscot County.
B.S., Maine, 1938

Clyde Elwin Higgins, Kennebec County.
B.S., Maine, 1936

Lucinda Ewer Rich, Knox and Lincoln Counties.
B.S., Maine, 1937

Wayne Schermerhorn Rich, Androscoggin and Sagadahoc Counties.
B.S., Maine, 1934

Doris Eleanor Rosen, Oxford County.
B.S., Maine, 1934

Committees of the University Faculty

ADMINISTRATION—President, College Deans, Dean of Men, Registrar, Treasurer.
ASSEMBLIES—Lutes, Loring, Morrow, Watson.
ATHLETICS—Corbett, Gardner, A. K., Kent.
COE RESEARCH FUND—Dickinson, Ashby, Brautlecht, Griffee, Hill, A. S., Hitchner, Peterson, Steinmetz.
EDUCATIONAL RESEARCH—Crawford, Bennett, C. E., Brautlecht, Brush, E. N., Bryan, Dow, E. F., Evans, Greene, Jackman, Jones, Kirshen, Lamson, Leavitt, Merchant, Sweetman, Watson.
ELIGIBILITY—Gannett, Curtis, Sprague, A. W., Wilson, E. G.
FINANCIAL AFFAIRS—Youngs, Kent, Pierce.
HEALTH—Hall, W. C., Corbett, Lengyel, Wallace, Wilson, E. G.
HONORS—Brann, Chadbourne, A. H., Crane, Creamer, Ellis, Greene, Loring, Wilson, E. F.
MAINE STUDIES—Hitchner, Bradt, Ellis, Ibbotson, Lutes, Morrow, Peterson.
MILITARY—Alcott, Hauck, Allen, Cloke, Deering, Lutes.
PUBLICATIONS—Gannett, Coggeshall, Crawford, Ibbotson, Leavitt, Libby, W. C.
PUBLICITY—Coggeshall, Bray, Crawford, Crossland, Day, Gannett.
RADIO—Crossland, Crawford, Creamer, Dusenbury, Larsen, Lathrop, Loring.
RHODES SCHOLARSHIP—Ashby, Bradt, Corbett, Gannett, Morrow.
SCHEDULE—Gannett, Dorsey, Evans, Peterson, Weston, and College Deans.
SECONDARY SCHOOL RELATIONS—Crane, Allen, Cloke, Deering, Lutes.
SOCIAL AFFAIRS—Watson, Corbett, McReynolds, Wilson, E. G., Youngs,
WOMEN STUDENTS—Wilson, E. G., Buzzell, Chadbourne, A. H., Crandon, Greene, Lengyel, Sweetman.

GENERAL INFORMATION

HISTORY

The University of Maine is a part of the public educational system of the State. It was established originally as the State College of Agriculture and the Mechanic Arts under the provisions of the Morrill Act, approved by President Lincoln in 1862. The next year the State of Maine accepted the conditions of the Act and in 1865 created a corporation to administer the affairs of the college.

The institution opened September 21, 1868, with a class of twelve members and a faculty of two teachers; Dr. Merritt Caldwell Fernald was appointed acting president. By 1871 four curricula had been arranged—Agriculture, Civil Engineering, Mechanical Engineering, and Elective. By gradual growth these curricula developed into the College of Agriculture, the College of Technology, and the College of Arts and Sciences. Women have been admitted as students since 1872, in compliance with special legal enactment. The original name was changed to the University of Maine in 1897. The School of Education was established in 1930.

The Maine Agricultural Experiment Station was established as a division of the University by act of the Legislature of 1887, as a result of the passage by Congress of the Hatch Act. It succeeded the Maine Fertilizer Control and Agricultural Experiment Station, which had been established in 1885.

The College of Law was opened in 1898. It was an integral part of the institution and until the year 1917 occupied quarters at the corner of Union and Second streets in Bangor. Later it was located on the campus at Orono. It was discontinued in 1920.

Graduate instruction has been given by various departments for many years. The first master's degree was conferred in 1881. Since 1923 graduate work has been a separate division in charge of a dean.

Beginning with 1902, a Summer Session has usually been held annually, consisting at first of five weeks, but now of six. It is designed primarily for teachers and educational administrators and for college students who desire to make up work or secure additional credits.

To provide permanently for the support of the University the Legislature in 1929 passed an act levying a tax of one mill on the general property valuation of the State.

The University is controlled by a Board of Trustees. The first Board was composed of sixteen members, each county delegation in the Legislature selecting one member. Various changes have occurred in the appointment of Trustees. At the present time seven members are appointed by the Governor of the State, with the advice and consent of the Council, for a term of seven years. One member is appointed for three years by the Governor upon the nomination of the Alumni Association. The Commissioner of Education is ex officio a member of the Board.

The institution has been served by the following presidents: Rev. Charles Frederick Allen, Dr. Merritt Caldwell Fernald, Dr. Abram Winegardner Harris, Dr. George Emory Fellows, Dr. Robert Judson Aley, Dr. Clarence Cook Little, Dr. Harold Sherburne Boardman, and Dr. Arthur Andrew Hauck.

LOCATION

The University is located in Orono, an attractive town of 3,400 population on the main line of the Maine Central Railroad. It is about half way between Kittery, the most southerly town in the State, and Fort Kent the most northerly; it is thus not far from the center of population of the State.

The extensive campus, of over two hundred acres situated about a mile from the business section of Orono, borders the Stillwater river, a branch of the Penobscot, and is of great beauty. The University is approximately nine miles distant from Bangor and three miles from Old Town. Route 2, passing the campus, connects it with these cities and offers easy access by automobile. Cars of the Bangor Hydro-Electric Company afford a half-hour trolley service in both directions.

Bangor, the third city of the State in size, has a population of about 29,000 and is an important business center. The location of the University gives students an opportunity to avail themselves of its various advantages. Old Town is a manufacturing city with about 7,200 inhabitants.

BUILDINGS AND THEIR EQUIPMENT

Balentine Hall (1914-1916).—The largest women's dormitory, with accommodations for 115 students and an infirmary. Named in honor of Elizabeth Abbott Balentine, secretary and registrar of the University, 1894-1913.

Colvin Hall (1930).—A women's dormitory with accommodations for forty-eight students. Named in honor of Dr. Caroline Colvin, Professor Emeritus of History and Government and the first dean of women at the University.

THE ELMS.—A women's dormitory located on College Road near the Stillwater bridge and accommodating thirty-three students.

HANNIBAL HAMLIN HALL (1911).—A men's dormitory with accommodations for 152 students. Named for the Hon. Hannibal Hamlin, of Hampden and Bangor, the first president of the Board of Trustees.

THE MAPLES.—A building remodelled in 1931 to serve as a freshman women's dormitory. It accommodates forty-six students.

NORTH HALL.—A freshman women's coöperative dormitory with accommodations for twenty-eight students. It is maintained by the students under trained supervision.

OAK HALL (1937).—A modern, fireproof dormitory housing ninety-four men students. This new building like the "Oak Hall" built in 1871, which it replaces, is named for the Hon. Lyndon Oak, of Garland, a long-time member and president of the Board of Trustees.

SOUTH HALL.—A women's coöperative dormitory, located in the village of Orono, with accommodations for forty students. It is maintained at minimum expense by the students under trained supervision.

ALUMNI HALL (1901) contains administrative offices, a gymnasium for women, and a Little Theatre. It received its name because of contributions made by alumni to supply a part of the funds for its erection.

ALUMNI MEMORIAL, consisting of an Indoor Field, Armory, and Gymnasium, was erected as a memorial to the Maine men who died in the service of their country in the Spanish-American and World Wars. It cost nearly $500,000, and is the gift of alumni, faculty, and friends of the University. The Indoor Field (1926), one of the largest in the country, provides ample facilities for indoor track, winter baseball practice, and military drill. The Armory (1926) houses offices and classrooms of the military unit, including an indoor rifle range. The Gymnasium (1933) contains the offices of the Athletic and Physical Education departments, equipment and training rooms for handball, boxing, wrestling, and corrective exercise, shower and locker rooms for students, faculty, and visiting teams, and an auditorium with a seating capacity of approximately 2500, used for basketball, lectures, student assemblies, banquets, and dances.

AUBERT HALL (1914) houses the Departments of Chemistry and Chemical Engineering, Pulp and Paper Technology, and Physics. It was named in honor of Alfred Bellamy Aubert, professor of chemistry from 1874 to 1909.

COBURN HALL (1888) houses the Department of Botany and Entomology and the Department of Zoology. It was named for the Hon. Abner Coburn,

of Skowhegan, a former president of the Board of Trustees and benefactor of the University.

Crosby Laboratory (1928) contains the laboratories of the Department of Mechanical Engineering. It was named for the Hon. Oliver Crosby, Class of '76, who bequeathed $100,000 for its construction.

Fernald Hall (1870), the oldest building on the campus, contains offices and classrooms used by the College of Technology, the offices of the Alumni Association and the Placement Bureau, the University Store, and the quarters of the Health Department. It was named in honor of ex-President Merritt Caldwell Fernald.

Holmes Hall (1888) is the building used by the Maine Agricultural Experiment Station. It received its name from Dr. Ezekiel Holmes, of Winthrop.

Library Building (1906) was erected and furnished by the generosity of Andrew Carnegie, who gave $55,000 for that purpose. The Hallowell Granite Works supplied the granite at a price equivalent to a gift of several thousand dollars.

Lord Hall (1904) is used by the Departments of Electrical Engineering and Mechanical Engineering. It was named for the Hon. Henry Lord, a former president of the Board of Trustees.

Merrill Hall (1931) is devoted to work in Home Economics. It was named for Dr. Leon S. Merrill, dean of the College of Agriculture from 1911 to 1933.

Rogers Hall (1928) houses the divisions of Animal Husbandry and Dairy Husbandry of the Department of Animal Industry and contains laboratories for the manufacture of dairy products. It was named in honor of Dr. Lore A. Rogers, chief of research laboratories, Bureau of Dairy Industry, U. S. Department of Agriculture.

Stevens Hall (1924), with two wings constructed in 1933, supplies accommodations for the larger part of the work of the College of Arts and Sciences and also the School of Education. It was named in honor of Dean Emeritus James S. Stevens, for many years dean of the College of Arts and Sciences.

Wingate Hall (1892) is used by the Departments of Civil Engineering and Engineering Drafting and in addition contains the Technology Experiment Station laboratories. It was named for the Hon. William P. Wingate, a former president of the Board of Trustees.

Winslow Hall (1909) is used by various departments of the College of Agriculture and the Extension Service. It was named for the late Hon. Edward B. Winslow, of Portland, a former president of the Board of Trustees.

Minor buildings comprise the Agricultural Engineering Building, Horticultural Greenhouses, Milk House, Poultry Buildings, Research Building, Stock Judging Pavilion, Mechanical Engineering Shops, Maine Christian Association Building, Observatory, Men's Infirmary, Print Shop, Home Management House, the Central Heating Plant, the President's house, several residences occupied by faculty members, and various farm buildings.

Marine Station.—The University of Maine Marine Biological Station is located at East Lamoine on the northeast shore of Frenchman's Bay within fifty miles of the University. The buildings provide adequate housing for laboratories, research workers, students, and faculty. A pier with 400 foot frontage, row boats, and a motor boat, and various types of collecting apparatus facilitate marine investigation. Both research work and organized class work are carried on at the Station in the summer.

Fraternity Houses.—The local chapters of Beta Theta Pi, Delta Tau Delta, Kappa Sigma, Lambda Chi Alpha, Phi Kappa Sigma, Sigma Alpha Epsilon, Sigma Chi, Theta Chi, Sigma Nu, and the Phi Eta Kappa Society have houses on the campus. The following chapters own houses in the vicinity of the University: Alpha Gamma Rho, Alpha Tau Omega, Phi Gamma Delta, Phi Mu Delta, and Tau Epsilon Phi. These houses accommodate from twenty to fifty students each.

ATHLETIC FIELDS

Alumni Field.—Alumni Field, so called because funds required for its construction were contributed by the Alumni Association, is located at the northern end of the campus. It contains a quarter-mile cinder track, with a 220-yard straightaway, and is graded and laid out for football and track and field athletics. It contains grandstands with a seating capacity of 5,000 and also bleachers seating 3,700. New additions include varsity and freshman baseball grounds, regarded as two of the best in New England and conforming to all major-league field requirements, a freshman football field, seven clay tennis courts and one hard-surface court, and a hammer field.

Athletic Field for Women.—A field on the southern end of the campus consists of a regulation hockey field, archery range, and a large practice

area. It is well lighted by flood lights for late afternoon activities. A field house on the western border consists of a club room, a store room for athletic equipment, and kitchenette. Besides serving for instruction and rest for teams not in action, it is used for picnics, social gaherings, and as a reading room. Two new tennis courts were added to this plan during the fall of 1937, which materially relieve the increased demand for instruction and recreation in tennis.

THE UNIVERSITY FARMS

The University farms consist of approximately 645 acres divided into two farms, one of which adjoins the campus while the other is located in Stillwater. The land under cultivation amounts to 267 acres, divided as follows: 217 acres for farm crops, ten acres for orchards, two acres for the forest nursery, eighteen acres for poultry lots, twenty acres for systematic forestry, and 378 acres of forest and pasture lands. These farm lands, together with the campus, make the University holdings at Orono and vicinity approximately 745 acres.

THE LIBRARY

The University Library contained, at the end of the academic year, 132,071 volumes and over 33,000 pamphlets, including the following: Law Library, 5,600 volumes, available for reference at the Court House in Bangor; Agricultural Experiment Station Library, 9,706 volumes, on deposit in the library building; Maine Collection, 6,000 volumes and pamphlets, shelved in the Maine Room and provided with a special card catalog; the Clinton L. Cole Marine Library, 600 volumes, in memory of Clinton L. Cole, Maine '00. The Library receives currently about 750 periodicals, the Agricultural Experiment Station, 200.

In addition to the reference and periodical rooms, the Library provides special reading rooms for Agriculture, Education, and Technology, where are assembled the books, periodicals, indexes, and abstracts pertaining to these subjects.

The library building, the gift of Andrew Carnegie, was built in 1906. The installation, in 1937, of a new lighting system, acoustical tiled ceilings, heat control, ventilating units, and new floor coverings has resulted in greatly improved conditions for study.

Elementary instruction in the use of the library is given new students during Freshman Week. This includes lectures and practice in the use of the catalog and magazine indexes.

While the University Library is not equipped to supply books to individuals outside the University, it is glad to lend books to other libraries, to schools, and to graduates of the University when it can be done without interference with local needs. Transportation charges are payable by the borrower. Individuals wishing to borrow books should first consult their local librarian, who will forward the request, whenever necessary, to the State Library. The State Library, acting as a clearing house for book loans between libraries in the State when it cannot completely supply the material needed, may forward the request to another library.

Any book in circulation or shelved elsewhere on the campus may be recalled to the library at any time. All library books must be returned to the library before the close of the academic year in June for inventory, repair, and binding.

Library Hours

7:45 a.m.—9:30 p.m. Monday-Thursday
7:45 a.m.—9 p.m. Friday
8 a.m.—5 p.m. Saturday
2 p.m.—9:30 p.m. Sunday

THE ART COLLECTION

The place of the Fine Arts in a college curriculum in extending the range and balance of the so-called cultural studies has been recognized at Maine for many years, and the art-teaching apparatus has grown to some 7,000 reproductions covering every important school and period of western art from the earliest Egyptian down to the "modern." The collection has been built up on the theory that architecture, sculpture, and painting have their recognized places in the story of human progress, and that these forms of expression have much to convey to the students of history, letters, and present-day social problems as well as to the special student of art.

The Carnegie Corporation gift of nearly 2,300 reproductions, many of these in color, gave the collection so much impetus in 1935 that special quarters for exhibition purposes were provided in the summer of 1937. The third floor of the south wing of Stevens Hall was made over into a gallery space of two rooms, a small one for American art and a large hall with wall footage augmented by a dozen movable panels providing thus some 700 square feet

additional hanging space. This room displays approximately 600 reproductions, presenting a sketch of western art over a period of 5,000 years. Special stress is given to the art of ancient Greece, the Gothic age, and the period of the Italian Renaissance.

Much of the instruction in some of the courses is given in the gallery, and students are required to use this display in meeting the requirements of the different courses. In fact, the gallery stands in about the same relation to the work of the art department that the laboratories do to the departments of science. The historical and progressive point of view is kept before the eye by adequate labeling, dating, and period hanging or grouping.

From the stock of the art collection two outside extension features have been started. One of these is a Travel Exhibit of thirty pictures, showing masterpieces selected from all ages. Reading notices accompanying these pictures add to the value of the exhibition which, available for any community in the State for a period of ten days, carries a message to many points, in a field of universal interest. The collection is also drawn upon to provide the fraternity and dormitory homes on and off campus with two pictures each. These are exchanged each semester for two new pictures, and, as in the case of the state-wide travel exhibit, typed notices, numbered to identify them, accompany the pictures.

The gallery is open to students and public alike on week days from 9:00 to 12:00 a.m. and from 1:30 to 5:00 p.m., and on Sundays from 2:00 to 5:00 p.m.

The cabinets and cases containing the major part of the photographic collection are accessible for students and faculty in Room 36, South Wing of Stevens Hall.

Scientific Collections

The biological collections are located in Coburn Hall.

Zoology.—These collections consist of a working collection of bird skins; a display collection of bird mounts; a study collection of various other groups of both vertebrates and invertebrates. These are arranged in the various rooms and laboratories where they are best available for purposes of class use.

Botany.—These collections are situated in room 24 on the second floor. The herbarium includes several collections of considerable value, the most important of which is the one made by the late Rev. Joseph Blake and presented to the University by Mr. Jonathan G. Clark, of Bangor. It contains more than 7,000 species of both flowering and flowerless plants, and represents more especially the flora of Maine and other New England States, but includes many forms from the Western United States, Mexico, and the West Indies, and a number from many of the European and Asiatic countries, and from

Africa and Australia. The late Professor F. L. Harvey left to the herbarium the general collections accumulated during his connection with the University, and his special collection of the weeds and forage plants of Maine, comprising 300 species. Other important collections are Collins's Algae of the Maine Coast, Halsted's Lichens of New England, Halsted's Weeds, Ellis and Everhart's North American Fungi, Cook's Illustrative Fungi, Underwood's Hepaticae, Cummings and Seymour's North American Lichens.

Geology.—The geological collections of minerals, rocks, and fossils are stored on the third floor in Fernald Hall. One large wallcase, containing mineralogical specimens, is located on the first floor of Winslow Hall.

UNIVERSITY PUBLICATIONS

Maine Bulletin.—A publication issued monthly from August to May inclusive with two issues in the month of February and three issues in the month of March, to give information to the alumni and the general public. It includes the Biennial Report, the Summer Session Bulletin, and the Annual Catalog.

University of Maine Studies, Second Series.—A series of research studies by members of the faculty and graduate students, published under the direction of the Faculty of Graduate Study.

Annual Report and Other Bulletins of the Agricultural Experiment Staton.—The annual report gives a brief summary of the progress during the year on the various research projects together with pertinent weather and financial data. Other bulletins present results of completed studies or certain phases of studies for which data have been obtained sufficient to warrant conclusions.

Official Inspections bulletins contain the results of the work of inspection of agricultural seeds, commercial feeding stuffs, commercial fertilizers, drugs, foods, fungicides and insecticides.

Extension Bulletins, News, and Radio Releases are issued by the Extension Service. Single copies of bulletins and circulars will be mailed to any Maine resident who makes the request. News releases are sent to all daily and weekly newspapers. Radio releases are issued each week to four coöperating broadcasting stations in Maine.

Technology Experiment Station Publications consist of bulletins giving the results of investigations and research, and are usually sent free of charge on request.

The Maine Alumnus, published nine times during the academic year by the General Alumni Association, is sent to former students of the University who subscribe through the payment of alumni dues.

Student publications are described in the section "Student Activities."

HEALTH SERVICE

The Health Department offers certain services, including medical examination, clinic, infirmaries, and isolation to those students paying the health fee. The staff is composed of a University doctor and two nurses. Students, however, are free to consult any physician they desire but at their own expense. A clinic service, located at 20 Fernald Hall, is available daily except Sunday. There is an infirmary for men and one for women. The University Health Service cannot treat patients suffering with chronic illnesses, those requiring surgical treatment, or those in need of the services of a specialist.

PLACEMENT BUREAU

A University Pacement Bureau was inaugurated in 1935 by the University in coöperation with the General Alumni Association to offer to graduates and employers a central bureau for information. The Bureau is administered with a threefold purpose, namely: (1) to discover and to increase opportunities for employment of Maine students and graduates in all fields of work other than teaching; (2) to gather information about graduates for employers and about business concerns and trends for graduates and to help them make valuable contacts in their chosen fields; (3) to coöperate with the University departments in helping graduates to discover the kinds of employment for which their total qualifications fit them so as to decerease as much as possible the changes and readjustments of post-graduate employment.

No charge to students, first-year graduates, or employers is made, although a nominal fee to cover clerical costs is charged older alumni placed through the assistance of the Bureau. The duties of the Bureau also include the attempt to secure part-time work during the college year and summer employment for undergraduates. The Bureau endeavors to assist the greatest number of students and graduates possible, to locate satisfactory employment, and will welcome inquiries from employers regarding its policies and services.

TEACHERS' REGISTRATION BUREAU

A registration bureau for teachers, located in the office of the Dean of the School of Education in Stevens Hall, undertakes to assist properly qualified graduates and former students in securing positions. All seniors who plan to teach are urged to register with the committee. Correspondence with officials who are looking for teachers is welcomed. No fee is charged for this service to students.

STUDENT ACTIVITIES

Cooperative Government

STUDENT SENATE.—The Student Senate comprises representatives from the following groups: (a) the several fraternities, (b) the Women's Student Government, (c) the dormitories, (d) the off-campus men. As an assembly truly representative of the student body, it is recognized by the faculty and the administration as the official organ of the student body in all matters that call for discussion and adjustment between the student body and the administration. The Senate is empowered to investigate any question relative to the student body or any member thereof and to recommend action on the same to the administration. The Senate is empowered to summon before it any student or students for trial or testimony.

WOMEN'S STUDENT GOVERNMENT ASSOCIATION.—All women registered at the University of Maine are members of this association. The purpose of the organization is to encourage among the women of the University an active sense of responsibility for self government. It also attempts to promote the highest standards of honor and integrity in all matters of personal conduct. The association enacts whatever laws are necessary to maintain congenial relationships on the campus.

Religious Activities

MAINE CHRISTIAN ASSOCIATION.—The Maine Christian Association, serving students of all religious faiths, has as its object the promotion of Christian fellowship, knowledge, and service. The work is done by student committees, under the guidance of a man and a woman secretary and a group of cooperating pastors. The Association conducts religious services, discussions of practical student questions and social problems, holds retreats, sends out religious deputations to churches and schools, brings comfort to the sick, and in general seeks to meet the spiritual needs of the students. The secretaries act as representatives of several cooperating denominations. The work centers in the Maine Christian Association Building, which also serves as a union building for student activities. Its rooms for reading, rest, recreation, meals, study, and worship are open all day.

Honor Societies

There are at the University a number of honor societies designed to recognize attainment and promise in its various divisions. These elect to

membership at regular intervals according to their respective standards, those students whom they desire to honor. The tabulation below shows the scope of each society, and the date at which a chapter was established at the University.

PHI KAPPA PHI (1900).—All colleges and the School of Education.
ALPHA ZETA (1906).—Agriculture.
KAPPA DELTA PI (1932).—School of Education.
OMICRON NU (1931).—Home Economics.
PHI BETA KAPPA (1923).—College of Arts and Sciences.
TAU BETA PI (1911).—Engineering.
XI SIGMA PI (1917).—Forestry.

Professional and Departmental Organizations

Many departments or divisions of the University sponsor an organization to bring together students having a common interest. Such clubs with the subject in which each specializes follow.

Professional Societies

ALPHA CHI SIGMA.—Chemistry, Chemical Engineering, and Pulp and Paper Technology.
AMERICAN CHEMICAL SOCIETY.—Chemistry, Chemical Engineering, Pulp and Paper Technology.
STUDENT BRANCH OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS.
BRANCH OF THE AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
BRANCH OF THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
BRANCH OF THE AMERICAN HOME ECONOMICS ASSOCIATION.
KAPPA PHI SIGMA.—Education.
SCABBARD AND BLADE.—Military.

Departmental Clubs

AGRICULTURAL CLUB.
CERCLE FRANÇAIS.—French.
CIRCULO ESPAÑOL.—Spanish.
COLLEGE 4-H CLUB.—Boys' and Girls' Agricultural and Home Economics Clubs.
CONTRIBUTORS' CLUB.—Creative writing.
DELTA PI KAPPA.—Music.
DEUTSCHER VEREIN.—German.

Education Club.
Forestry Club.
Home Economics Club.
Kappa Gamma Phi.—Journalism.
Maine Masque.—Dramatics.
Sigma Delta Zeta.—Mathematics.
Sigma Mu Sigma.—Psychology.
Sodalitas Latina.—Latin.

Musical Organizations

University Band.—This organization is attached to the Military Department. Rehearsals are credited as regular class work under the Military and Music Departments. A particular aim is to develop leadership, and to this end, in coördination with the course in interpretation and conducting in the Music Department, students properly qualifying are coached to conduct the concert presentations of the band. The band plays for various university functions and games and gives concerts.

University Chorus.—This organization, open to both men and women students, has for its objective the study and public performance of choral music. Participation in college assemblies, student concerts, a National Music Week oratorio concert with the Bangor Symphony Orchestra, and the annual Bangor Music Festival comprises the program. The sharing in programs at the Festival with world-famous musicians and concert artists renders this choral work inspiring and memorable. The chorus is conducted by the Professor of Music as class work, for which students receive credit. Conditions of membership are listed under the Department of Music (Courses 25, 26).

University Orchestra.—This organization, recruited from the outstanding student talent, devotes weekly rehearsals to the study of standard and symphonic music. Its repertoire is presented in concerts on and off the campus. It accompanies the University Chorus and soloists in the annual Christmas Vespers and Music Night programs. Credit is granted for orchestra participation. Conditions are listed under the Department of Music (Courses 27, 28).

Social Fraternities and Sororities

The following fraternities and sororities have chapters, the figures in parentheses giving the dates chapters were established at the University.

Fraternities.—National: Beta Theta Pi, (1879); Kappa Sigma (1886); Alpha Tau Omega, (1891); Phi Kappa Sigma, (1898); Phi Gamma Delta, (1899); Sigma Alpha Epsilon, (1901); Sigma Chi, (1902); Theta Chi,

(1907); Delta Tau Delta, (1908); Lambda Chi Alpha, (1913); Sigma Nu, (1913); Phi Mu Delta, (1923); Alpha Gamma Rho, (1924); Tau Epsilon Phi, (1929). Local: Phi Eta Kappa, (1906).

Sororities.—National. Alpha Omicron Pi, (1908); Phi Mu, (1912); Delta Delta Delta, (1915); Pi Beta Phi, (1920); Chi Omega, (1921).

Student Publications

Maine Campus.—A newspaper published weekly during the academic year by an editorial board composed of students.

Prism.—An illustrated annual published by the junior class.

Men's Debating Society

The Debating Society is open to all students interested in forensic work. Questions of public interest are discussed. The members make a special study of the questions used for intercollegiate debating. From this group representatives are chosen to speak before luncheon clubs, grange meetings, and community gatherings, and to participate in the intercollegiate debates.

The University of New Hampshire, Bates College, Rhode Island State College, New York University, Rutgers University, the University of Vermont, Boston University, Massachusetts State College, Bowdoin College, and Colby College are among the institutions usually scheduled for these debates, which are frequently of a dual nature. Members of this society are selected to represent the University on a debating tour of Eastern institutions.

Women's Forum and Debate

Women's Forum is an outgrowth of the more formal work in debate. The forum meets once a week for the purpose of discussing informally subjects of special interest to its members. Women's intercollegiate debating is sponsored by the forum; however, no one is obligated to participate in this phase of the activity.

Women interested in formal debate have the opportunity, as in the past, to meet teams from other colleges. During the past years, the teams have taken part in debate with nearly every outstanding college in the East.

CHURCH SERVICES

Students receive a cordial welcome at the services of the churches of Orono—the Methodist Episcopal Church, St. John's Universalist Church, St. Mary's Roman Catholic Church, and the undenominational Fellowship Church. Other denominations are represented at Old Town and Bangor.

ADMISSION

ADMISSION TO THE FRESHMAN CLASS

General Requirements

Candidates for admission to the freshman class should apply to the Director of Admissions for an application card and other necessary blanks. These blanks should be returned promptly together with the application fee of $10 (and room deposit of $15 if a dormitory room is desired). *It is advisable to file application as early as March first to facilitate admission and room assignment for entrance the following September.*

Candidates must present satisfactory certificates of fitness, or pass the required examinations, and on registration day make a cash deposit covering the bills of one semester. The University admits men and women, both residents of Maine and non-residents; it reserves the right to terminate admission whenever the capacity of the University to care properly for the students has been reached.

It is requested that all entering students submit a certificate from a physician stating that they have been vaccinated for smallpox within the past seven years. If the applicant has not been vaccinated within this period it is recommended that he or she be vaccinated *early in the summer* in order to be well over the effects of the inoculation, if any, before the opening of college.

Admission from Schools in Maine

Graduates of Maine high schools or academies may be admitted on their school records provided they have completed, with recommending grades, a course of study including all the subjects needed for admission to the curriculum that they wish to follow (see page 60) and are fully recommended by their principal.

The University is interested in candidates whose character, scholastic attainments, aptitudes, interests, industry, and habits of study give definite promise of success in college work. If a candidate has a poor record during his last year or shows weakness in any subject vital to the curriculum he wishes to take in college, he may be refused admission. In general, greater weight will be given to the character of the candidate's work in the latter part of his course than to his earlier record.

Final decision regarding each candidate will be made by the University. In reaching such decision both the candidate's school record and the additional information called for below will be considered:

A. From the student. The candidate is required to submit a carefully answered questionnaire concerning favorite studies, school activities, community interests, hobbies, choice of college course, choice of a life work, and other matters bearing upon preparation for a college course. So far as possible, a personal interview will be arranged with each candidate. This information is required so that the University may better guide the students in selecting courses of study best suited to their individual abilities, aptitudes, and interests.

B. From the principal and others. The principal, teachers, and adult acquaintances, known to the applicant, are asked to give confidential information regarding character, personality, school and community activities, and intellectual capacity and ability to successfully pursue a college course.

Candidates from Maine schools may also gain admission by supplementing their school records with satisfactory grades through specified entrance examinations.

Admission from Schools Outside of Maine

Candidates from secondary schools outside of Maine may be admitted on certificate of the principal, provided the school is accredited by its state university or the recognized accrediting agency of the state or region in which the school is located, or by entrance examinations of the University of Maine. Certificates issued by the regents of the University of the State of New York are accepted for any of the subjects in which admission credit is allowed, provided they have been passed with satisfactory grade. Supplementary information is also required as stated in paragraph "B" under "Admission from Schools in Maine."

Admission by Examinations

Entrance examinations are held at Orono before the fall registration of freshmen. A schedule of the examinations will be furnished on request. Candidates for admission who wish to be examined in the spring can take the examinations at their own school, provided the principal is willing to arrange for giving the tests. These examinations are given during the fourth week in May. On request of any principal the University will send the necessary examination papers. Such requests should be received before May 11.

The examinations given by the College Entrance Examination Board will be accepted by the University. These examinations will be held June 17-24. All applications for these examinations must be addressed to the Secretary of the College Entrance Examination Board, 431 West 117th

Street, New York, N. Y., and must be made upon a blank form to be obtained from the Secretary of the Board upon application. Application must be made before May 29 and must be accompanied by the examination fee of $10.00.

Information on Freshman Week

About August 12 parents of each candidate admitted will receive from the Registrar's office a letter giving detailed instruction about arrangements for Freshman Week. Parents of candidates admitted after August 12 will receive the information at the time the candidate is admitted to the University.

Reports to Parents

The record of every freshman will be carefully reviewed at the end of eight weeks and again at the close of the first half-year's work. Reports are sent to parents at each of these dates.

Subject Requirements

Requirements for the individual colleges are as follows:

College of Arts and Sciences

English	3	units
Foreign language (three years in one or two in each of two)	3 or 4	"
History	1	unit
Mathematics (Algebra and Plane Geometry)	2	units
Electives	6 or 5	"
Total	15	units

College of Agriculture
(Including Forestry and Home Economics)

English	3	units
†*Algebra	1	unit
*Plane Geometry	1	"
Science	1	"
History	1	"
Electives	8	units
Total	15	units

College of Technology

English	3	units
Foreign language (two years in one)	2	"
Algebra	2	"
Plane Geometry	1	unit
History	1	"
Science	1	"
Electives	5	units
Total	15	units

Elective Units

The electives may be selected as shown in the following table. Subjects not listed may be accepted among the electives, provided they represent a satisfactory equivalent for any of those named. In general, it is advisable that the electives be taken from the fields of language, mathematics, natural science, and social science.

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* For admission to the Home Economics curriculum, two units in mathematics acceptable to the Committee on Admissions are required.

† For admission to the Forestry curriculum two units in algebra are recommended.

Subjects	Units Accepted		Units required and units accepted in the several colleges					
			Arts and Sciences		Agriculture		Technology	
	Min.	Max.	Req.	Acc.	Req.	Acc.	Req.	Acc.
English	3	3	3	3	3	3	3	3
French	*2	4	Three units in one language or two in each of two	2, 3, or 4		1, 2, 3, or 4	Two units in one language††	1, 2, 3, or 4
German	2	4		2, 3, or 4		1, 2, 3, or 4		1, 2, 3, or 4
Greek	2	3		2 or 3		1, 2, or 3		1, 2, or 3
Latin	2	4		2, 3, or 4		1, 2, 3, or 4		1, 2, 3, or 4
Spanish	2	3		2 or 3		1, 2, or 3		1, 2, or 3
Algebra (Elem.)	1	**2	1	2	‡1	2	2	2
Plane geometry	1	1	1	1	‡1	1	1	1
Solid geometry	½	½		½		½		½
Trigonometry	½	½		½		½		½
General Math.	½	1		½ or 1		½ or 1		½ or 1
History	1	4	1	1, 2, 3 or 4	1	1, 2, 3 or 4	1	1, 2, 3, or 4
Civics	½	1		½ or 1		½ or 1		½ or 1
Economics	½	1		½ or 1		½ or 1		½ or 1
Prob. of Democracy	½	1		½ or 1		½ or 1		½ or 1
Biology	†1	1		1	One unit in Science	1	One unit in Science	1
Botany	†1	1		1		1		1
Chemistry	†1	2		1 or 2		1 or 2		1 or 2
Physics	†1	2		1 or 2		1 or 2		1 or 2
Physiography	½	1		½ or 1		½ or 1		½ or 1
Physiology	½	1		½ or 1		½ or 1		½ or 1
Zoology	†1	1		1		1		1
General Science	½	1		½ or 1		½ or 1		½ or 1
Agriculture	1	4	Not over two units in all of these			Not over five units in all of these		Not over four units in all of these
Domestic Science and Art	1	4						
Drawing	‡½	2						
Manual Training	‡½	2						
Typewriting	‡½	1						
Commercial Subjects	½	4						
Music	½	2		½ or 2		½ or 2		½ or 2
Bible Study	½	1		½ or 1		½ or 1		½ or 1
Debating	½	1		½ or 1		½ or 1		½ or 1

*The minimum accepted in foreign languages applies to the College of Arts and Sciences only.

**Two units credit for elementary algebra completed. Technology candidates are expected to take some mathematics during their last year in school.

†The work in these subjects must include laboratory work with notebook, as specified in the detailed statement

‡Credit for these subjects is at the rate of one-half unit for a subject taken five forty-five minute periods per week for a year.

§See both footnotes at bottom of page 61.

††Latin or French preferred.

Requirements in Detail

ENGLISH

The course in Freshman English presupposes a study of English literature and of composition and rhetoric pursued throughout the preparatory school course. Candidates are expected to have had practice in writing equivalent to at least one composition a week during each of the four years in high school, and to have studied the elements of rhetoric in some such text as, for example, Tanner's *Rhetoric and Composition*. Experience shows that students who have had insufficient practice in writing in school are apt to have trouble in their college English.

The entrance examination is of an objective nature and is designed to test such matters as grammatical structure, spelling, capitalization, vocabulary, and literature.

FOREIGN LANGUAGES

LATIN.—I. *Amount and range of the reading recommended.* There are no prescribed readings in Latin, but the following recommendations are made:

1. In the second year the pupil should read easy Latin of gradually increasing difficulty. This may consist in part of "made" or adapted Latin. Not less than one semester of this year should be devoted to the reading of selections from Caesar. The reading for the year may also include easy selections from such authors as Aulus Gellius, Eutropius, Nepos, Phaedrus, Quintus Curtius Rufus, and Valerius Maximus.

2. If three years of Latin are taken, one semester should be devoted to the reading of selections from Cicero, and one semester to selections from Vergil.

3. If four years of Latin are taken, not less than one semester each should be devoted to Cicero and Vergil and the remaining time can be given to such authors as Sallust, Livy, and Ovid.

II. *Latin Word List.* The College Entrance Examination Board has prepared a Word List which indicates the vocabulary that students are expected to have at the end of two, three, and four years of study. Students will be expected to know accurately the words in his list.

FRENCH—I. *Elementary.*—Students who desire to receive credit for two units of high-school French should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life or based upon a portion of the French text read, and to answer questions on the fundamentals of French grammar.

II. *Intermediate.*—Those who desire credit for three units should be able to read modern prose and verse of moderate difficulty and to write a composition upon any subject within the range of everyday experience. Such students should also have a thorough knowledge of French grammar as presented by the Fraser and Squair and other textbooks of the same type, including a thorough study of the uses of the conditionals and subjunctives, and in general of such material as may have been in the work of the first two years.

The examination of the College Entrance Certificate Board in Elementary French will be accepted for two units, and that in Intermediate French for one additional unit.

GERMAN—*Elementary.*—The first year's work should comprise: careful drill upon pronunciation and oral work; the rudiments of grammar including the inflection of nouns, pronouns, and adjectives; the conjugation of the more common weak and strong verbs; the use of the more common prepositions; the conjugation and meanings of the modal auxiliaries; the elementary rules of syntax and word order; dictation and elementary composition; the reading of 75 to 100 pages of prose and poetry.

The second year's work should include the continued study of the grammar and composition, and the reading of 150 to 200 pages of literature.

The advanced German should include constant practice in conversation and composition, and the reading of about 400 pages of moderately difficult prose and poetry.

SPANISH—*Elementary.*—The equivalent of Course 1, 2 offered by the University. The first year's work is expected to familiarize the student with the fundamental principles of grammar, special stress being laid on the study of verbs and pronouns. Dictation, the translation of simple Spanish when spoken, and some translation into Spanish to illustrate principles of grammar will be employed. About 150 pages of modern prose will be read. In the second year in addition to the continued study of the grammar and the use of suitable exercises similar to those employed in the preceding year there should be read from 300 to 400 pages belonging to modern Spanish literature.

HISTORY

One unit is required by all colleges of the University for entrance. Four may be offered.

The student will be expected to show judgment as well as memory and be able to make comparisons and give summaries. Some knowledge of geography is required, and collateral reading is essential.

I. *Greek and Roman History.*—One unit.

Greek History.—To the death of Alexander with due consideration of Greek life, literature, and art. One-half unit.

Roman History.—To 800 A.D. with emphasis on government and institutions. One-half unit.

II. *English History.*—A general knowledge of the political and social development of England; in particular the growth of the limited monarchy with parliamentary government and the British Empire and Commonwealth. One unit.

III. *American History.*—Emphasizing political, social, and economic aspects. One unit.

IV. *Medieval and Modern History.*—One unit.

Medieval History.—To 1500. One-half unit.

Modern European History.—From 1500 to the present. One-half unit.

V. *World History.*—Beginning with ancient civilization and coming down to the present time. One unit.

MATHEMATICS

Algebra.—As algebra is a necessary foundation for successful work in advanced mathematics, all candidates expecting to continue mathematics in college should have a thorough knowledge of elementary algebra. They should offer two units.

Algebra to Quadratics.—One unit. The usual first-year course should give facility in factoring, simplification of fractions, solution of simple equations in one and two unknowns, use of graphs, exponents and radicals (simple forms), ratio and proportion.

Quadratics and Beyond.—One unit. Quadratic equations, systems of equations in which at least one is of a degree above the first, progressions, binomial theorem with integral exponents, exponents and radicals, logarithms.

Trigonometry.—One half unit. A half-year course with any standard textbook covering the definitions of the functions, the proofs of the standard formulas, proofs of identities, the solution of right and oblique triangles by natural functions and by logarithms. Simple applications of trigonometry.

Plane Geometry.—The usual theorems and constructions which treat the general properties of plane rectilinear figures, the circle and the measurements of angles, similar polygons, areas, regular polygons, and the measurement of the circle.

Solid Geometry.—The usual theorems and constructions which treat the

relations of planes and lines in space; the properties and measurement of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle.

Advanced Algebra.—Permutations and combinations with applications of the theory limited to simple cases; complex numbers with graphical representation of them and of their sums and differences; determinants, chiefly of the second, third, and fourth orders; methods of evaluating such determinants including the method involving the use of minors; the application of determinants to the solution of systems of equations of the first degree; so much of the theory of equations including graphical methods, Descartes' rule of signs and Horner's method, but not Sturm's functions or multiple roots, as is necessary for the solution of equations of higher degree with numerical coefficients; solutions of the general cubic and biquadratic equations.

SCIENCES

Biology.—This may consist of a continuous course for one year dealing with the problems of general biology, including the study of the structure, functions, and habits of both plants and animals; a course for one year in botany alone; a course for one year in zoology alone; or a course for one-half year in human physiology. The human physiology may be arranged to form a part of the general biology, or of the zoology; but in such cases it must be treated as an integral part of the subject under consideration.

The requirements in botany and zoology are the same as those of the College Entrance Examination Board, and are outlined in the syllabus of the Board. The notebook should include properly labeled drawings, and descriptions of experiments, representing as much of the work in this syllabus as may be practicable, and should be the record of a year's laboratory work in the subject. The making of an herbarium is optional.

Chemistry.—Preparation in chemistry should embody a reasonable grasp of the basic principles of the science, which can be secured by a continuous course of one year dealing with the common metallic and non-metallic elements in terms of fundamental chemical laws; familiarity with laboratory technique; and a permanent record of laboratory work in clear, concise English. A good elementary textbook and laboratory manual will furnish the basis for this preparation.

Physics.—The requirement in entrance Physics is met by a one-year course in an approved secondary school covering the fundamental topics in mechanics, heat, sound, electricity, magnetism, and light. The course should include laboratory, amounting to approximately one period a week, and the notebook should be certified by the instructor in charge.

ADMISSION OF SPECIAL AND SHORT COURSE STUDENTS

Special Students.—In exceptional cases a person may be classified as a special student. Such a student is not a candidate for a degree but will be registered by the dean or deans concerned.

Two-Year Course in Agriculture.—Candidates for admission to the Two-Year Course in Agriculture must have satisfactorily completed two years of high-school work.

ADMISSION BY TRANSFER

A student desiring to transfer to the University of Maine from another college of recognized standing must present the following credentials:

A statement of his entrance record.

A statement showing a complete record of his work while in attendance including faculty action, if any.

A letter of honorable dismissal.

These credentials must be sent directly from the Registrar's office and should be addressed to Director of Admissions, University of Maine.

Applicants should notify the Director of Admissions whether they desire admission to the College of Agriculture, the College of Arts and Sciences, the School of Education, or the College of Technology. A college catalog should be mailed unless the Registrar knows that the University of Maine is on the permanent mailing list. Applications from both men and women should be filed as an *early* date.

REGISTRATION

Freshmen.—All members of the incoming freshman class are REQUIRED to be in residence on the campus during the period known as Freshman Week. The dates are announced in the calendar in the front of the catalog. Following the general plan employed since its establishment, it will be devoted to tests of various sorts whereby the University authorities may obtain more accurate information concerning the type and degree of mental qualifications of the new students, and to lectures and demonstrations by which the students may be more intelligently informed of the University and its customs.

NO EXCUSES FOR NON-ATTENDANCE OTHER THAN ILLNESS CERTIFIED TO BY A PHYSICIAN IN GOOD STANDING WILL BE ACCEPTED.

Upperclassmen.—In the fall semester of 1939, upperclassmen will be required to register on September 19, or to present written evidence that they have been excused from so registering by the University authorities. In other words, upperclassmen must before September 19 have communicated with the dean of their college giving him their reasons for desiring to register late, and have received from him written authorization so to do. In the event of an unusual circumstance wholly beyond the control of the student, and occurring just prior to the opening of the fall semester, the student may present his case in person to the dean upon his arrival at the University. Late registration is a handicap both to students and to University authorities, and will be rigidly discouraged whenever and wherever possible.

STUDENT EXPENSES

A partial list of necessary expenses is indicated below. It includes only items which are fairly uniform for all students. The estimates are prepared upon the basis of students living in University halls. Board and room in North and South Halls are somewhat less than indicated below.

	Students from within the State	Students from without the State
Tuition	$150.00	$250.00
Textbooks	25.00 to 50.00	25.00 to 50.00
Board and Room	323.00	323.00
Special Assessment for Athletics & Debating	10.50	10.50
Health Service Fee	4.00	4.00
	$512.50 to $537.50	$612.50 to $637.50

The tuition for students taking the Two-Year Course in Agriculture is $70.00 a year. Such students do not pay the special assessment for athletics and debating.

Civil Engineering Summer Camp tuition for University of Maine students is $15.00. All other students are charged regular Summer Session tuition.

Application for Admission

A fee of $10.00 is required at the time of application. Checks should be made payable to the University of Maine. This fee is refunded if the appli-

cant is not admitted. When the applicant enters the University the fee will be applied toward payment of the first semester's tuition.

Application for Room

A deposit of $15.00 is required at the time application is made for a room. If a student is unable to enter, the deposit will be refunded, provided the room is given up on or before August 1. If notice of withdrawal is given on or before September 1, $10.00 will be refunded. In case of withdrawal after September 1, the entire deposit is forfeited, but may be applied toward the payment for a room if the applicant enrolls in the University the following year.

When a student enters the University the deposit of $15.00 will be applied toward payment of dormitory charges.

Special Charges

A fee of $2.00 is charged a student for each special examination.

Students registering after the prescribed day of registration for the fall or spring semester shall pay an additional fee of $2.00.

Rooms

The rooms in the Maples, a freshman dormitory for women, accommodate one, two, or three students.

The rooms in Balentine Hall, accommodating one and two students each, and those in Colvin Hall, accommodating two and four students each, are available to upperclass women students. The rooms in The Elms, accommodating two and three students each, are available mainly to upperclass women students. The rooms in North and South Halls, the coöperative dormitories for women, accommodate two students each and are available to all women students. There is, however, a selection based on financial need, coöperation, and satisfactory scholarship.

The rooms in Oak Hall and the middle section of Hannibal Hamlin Hall accommodate two students each; the north and south sections of Hannibal Hamlin Hall accommodate four students each. Oak Hall and Hannibal Hamlin Hall are freshman dormitories for men.

Dormitory charges include steam heat and electric lights. The rooms in the dormitories are furnished with beds, mattresses, chiffoniers, desks, and chairs. Each resident in the dormitory has bed linen and three towels laundered each week without extra charge. Students furnish pillows, bed linen, and blankets.

UPPERCLASSMEN.—In the fall semester of 1939, upperclassmen will be required to register on September 19, or to present written evidence that they have been excused from so registering by the University authorities. In other words, upperclassmen must before September 19 have communicated with the dean of their college giving him their reasons for desiring to register late, and have received from him written authorization so to do. In the event of an unusual circumstance wholly beyond the control of the student, and occurring just prior to the opening of the fall semester, the student may present his case in person to the dean upon his arrival at the University. Late registration is a handicap both to students and to University authorities, and will be rigidly discouraged whenever and wherever possible.

STUDENT EXPENSES

A partial list of necessary expenses is indicated below. It includes only items which are fairly uniform for all students. The estimates are prepared upon the basis of students living in University halls. Board and room in North and South Halls are somewhat less than indicated below.

	Students from within the State		Students from without the State	
Tuition	$150.00		$250.00	
Textbooks	25.00	to 50.00	25.00	to 50.00
Board and Room	323.00		323.00	
Special Assessment for Athletics & Debating	10.50		10.50	
Health Service Fee	4.00		4.00	
	$512.50	to $537.50	$612.50	to $637.50

The tuition for students taking the Two-Year Course in Agriculture is $70.00 a year. Such students do not pay the special assessment for athletics and debating.

Civil Engineering Summer Camp tuition for University of Maine students is $15.00. All other students are charged regular Summer Session tuition.

APPLICATION FOR ADMISSION

A fee of $10.00 is required at the time of application. Checks should be made payable to the University of Maine. This fee is refunded if the appli-

cant is not admitted. When the applicant enters the University the fee will be applied toward payment of the first semester's tuition.

Application for Room

A deposit of $15.00 is required at the time application is made for a room. If a student is unable to enter, the deposit will be refunded, provided the room is given up on or before August 1. If notice of withdrawal is given on or before September 1, $10.00 will be refunded. In case of withdrawal after September 1, the entire deposit is forfeited, but may be applied toward the payment for a room if the applicant enrolls in the University the following year.

When a student enters the University the deposit of $15.00 will be applied toward payment of dormitory charges.

Special Charges

A fee of $2.00 is charged a student for each special examination.

Students registering after the prescribed day of registration for the fall or spring semester shall pay an additional fee of $2.00.

Rooms

The rooms in the Maples, a freshman dormitory for women, accommodate one, two, or three students.

The rooms in Balentine Hall, accommodating one and two students each, and those in Colvin Hall, accommodating two and four students each, are available to upperclass women students. The rooms in The Elms, accommodating two and three students each, are available mainly to upperclass women students. The rooms in North and South Halls, the coöperative dormitories for women, accommodate two students each and are available to all women students. There is, however, a selection based on financial need, coöperation, and satisfactory scholarship.

The rooms in Oak Hall and the middle section of Hannibal Hamlin Hall accommodate two students each; the north and south sections of Hannibal Hamlin Hall accommodate four students each. Oak Hall and Hannibal Hamlin Hall are freshman dormitories for men.

Dormitory charges include steam heat and electric lights. The rooms in the dormitories are furnished with beds, mattresses, chiffoniers, desks, and chairs. Each resident in the dormitory has bed linen and three towels laundered each week without extra charge. Students furnish pillows, bed linen, and blankets.

Women students not living at home are required to live in one of the women's dormitories. In exceptional cases women students are allowed to live at some boarding house approved by the Dean of Women.

Applications for dormitory rooms should be addressed to the Registrar.

Gymnasium Uniform for Women

Every woman will be expected to purchase a prescribed uniform before coming to college. Information regarding uniform and place where it can be bought will be sent with admission cards. The approximate cost of the uniform is $15.00.

All women students who are using locker rooms and shower baths will be assessed fifty cents each semester for the use of towels.

Deposits to Cover Expenses

The University *requires all students to pay in advance.* The payments indicated below are required at the beginning of each semester.

Deposit	Residents of Maine	Non-Residents of Maine
Tuition	$ 75.00	$125.00
Board and Room	161.50	161.50
Key Deposit (men only)	5.00	5.00
Military Deposit (required of all men taking military instruction)	30.00	30.00
Special Assessment for Athletics and Debating	5.25	5.25
Health Service Fee	2.00	2.00
Freshman Week (Freshmen only)	8.00	8.00
	$286.75	$336.75

For students who do not room and board in University halls the above amounts are reduced by $166.50.

All men taking military are required to make a deposit of $30.00 to cover cost of equipment. This deposit is returned at the end of the year, less a charge for goods furnished, plus a charge for lost and misused equipment.

For students in the Two-Year Course in Agriculture the deposit required for tuition is $35.00.

Diploma Fee

All students receiving a degree are required to pay a diploma fee of $5.00.

Communications

Communications with reference to financial affairs of students should be addressed to the Treasurer of the University of Maine.

LOAN FUNDS

Application for loans should first be made to the Dean of Women by women students and to the Dean of Men by men students. Where requirements make necessary a different handling of loans, either of these officials will refer the request to the proper person.

Kittredge Fund.—This fund, amounting to over $2300, was established by Nehemiah Kittredge, of Bangor. It is in the control of the President and the Treasurer of the University, by whom it is loaned to needy students in the three upper classes. Individual loans are limited to $50.

American Institute of Electrical Engineers Loan Fund.—This fund, now amounting to $185, was established by the University of Maine Branch in 1918 for the purpose of assisting needy students majoring in electrical engineering.

Boston Alumnae Fund.—This is a fund now amounting to over $600, available for women of high scholastic standing who have completed at least two years of college work. Loans shall in no case exceed $200.

Maine Campus Fund.—This fund, the gift of the Maine *Campus*, amounting to $460, is loaned to juniors and seniors whose conduct and scholarship are satisfactory, preference being given to those interested in the literary activities of the University. Amount loaned is limited to $50 per person. Loans must have the endorsement of a satisfactory second party.

Class of 1926 Loan Fund for Seniors.—This fund, the gift of the Class of 1926, amounting to over $1200, is loaned to seniors of good scholastic standing during the last semester of their senior year. Amount loaned is $50 per person, exceptional cases to be allowed $100.

Carleton Orchard Fund.—This fund originated in the gift to the State of Maine by James A. Gregory of one interest-bearing first mortgage bond for $1000, the interest on which was to be used for the promotion of scientific orcharding in Maine. At first administered by the Maine Department of Agriculture, the income from this bond was transferred in 1925 to the College of Agriculture of the University "for the assistance of needy students who shall be residents of the State of Maine, majoring in horticulture at the said college of agriculture."

MARY S. SNOW MEMORIAL FUND.—Students and friends of Mary S. Snow, one-time superintendent of schools in Bangor, and later a leader in home economics education, have established as a tribute to her memory a loan fund to be used in helping earnest and deserving young women secure a home economics education at the University of Maine. The fund at present amounts to over $4325. Loans may be granted to young women of such character and scholarship as give promise that the education thus made possible will be of genuine value to the students and to society.

WOMEN'S LOAN FUND.—This fund was inaugurated by the American Association of University Women, University of Maine Branch, in 1925. It provides for loans to undergraduate women of the University who have successfully completed one or more years of university work, and have been found by the University to be thoroughly satisfactory in regard to character, scholarship, and general ability, and to be in genuine need. The fund amounts at present to $2125; and loans to one student shall not exceed $200 a year.

DRUMMOND FUND.—This fund of $1000 was established in memory of Frank Hayden Drummond, of Bangor, by his widow and children. It is loaned to needy students of good character who have attained an average of "C" or its equivalent.

AMERICAN PULP AND PAPER MILL SUPERINTENDENTS' ASSOCIATION FUND.—This fund amounts to $2500. The income is to be used to improve instruction and aid investigations in pulp and paper chemistry and technology, to develop coöperation between pulp and paper mill superintendents and young technical graduates, or to be loaned to meritorious students pursuing the pulp and paper course. A report is to be made annually to the Association.

GENERAL LOAN FUND.—This fund, now amounting to $2990, was donated by unknown friends, students, and faculty of the University. The first donation was made in May, 1930, and has been increased at various periods since that time.

THE BANGOR BUSINESS AND PROFESSIONAL WOMEN'S LOAN FUND.—This fund, now amounting to $1015, was established by the Business and Professional Women's Club of Bangor, Maine, for needy and deserving women students, preferably from Bangor and vicinity, who have been in attendance at least two years and who have maintained an average grade of "C" or better. Loans shall not exceed $250 per student.

KAPPA PSI LOAN FUND.—This fund, amounting to $230, was donated by the Kappa Psi Sorority during the spring of 1933, to be used for the benefit of women students.

ESTHER AYRES CHAPTER, DAUGHTERS OF AMERICAN REVOLUTION LOAN FUND.—This fund, amounting to $200, is a gift of the Orono Chapter of the D.A.R. and is to be loaned to women students who are juniors or seniors.

Charles M. Payson Loan Fund.—This fund, amounting to $5540, was given by Mrs. Charles M. Payson, of Portland, Maine, in memory of her late husband. It is to be loaned to needy students under such conditions as may be established by the University administration.

The Bertha Joy Thompson Loan Fund, amounting to $10,000, was bequeathed, in trust, to the University of Maine by the late Mrs. Bertha Joy Thompson, of Ellsworth, Maine. The net income from the fund is to be used as a "Loan Fund" to be loaned to worthy, deserving, and needy students of the University of Maine under such terms and conditions as the Board of Trustees may determine.

Delta Chi Alpha Loan Fund.—This fund, the gift of the Delta Chi Alpha Fraternity, amounting to $680, is available for loan to a male member of the senior class whose average college grade has been equivalent to "C" or better. The amount loaned each year is limited to $50.

American Agriculturist Foundation Loan Fund.—This fund was inaugurated by the American Agriculturist Foundation, Inc., to enable deserving junior and senior students in Agriculture and Home Economics to complete their education. The fund is administered by a loan committee, of which the Dean of the College of Agriculture is chairman.

Buck Memorial Fund.—The Buck Memorial Fund of over $3,000 was established in 1938 by friends and alumni of the University in memory of Hosea B. Buck of the Class of 1893. The Fund was raised through the University of Maine Foundation of which Mr. Buck was a charter member. Since Mr. Buck, by judicious financial assistance, made it possible for a number of men to attend the University, it is proposed that the income of this fund be used for scholarships.

SCHOLARSHIPS AND PRIZES

Forms for making application for scholarships may be obtained from the Chairman of the Faculty Committee on Honors or from the Registrar's Office, and should be returned to the Chairman before March 1. Candidates may, if they wish, apply for particular scholarships. No student whose record is unsatisfactory will be considered eligible for any scholarship award. Unless otherwise indicated, all awards are made by the Committee on Honors, subject to the approval of the President.

Scholarships available for graduate students are described in the section of the Catalog dealing with graduate study.

The Merritt Caldwell Fernald Scholarship, $150, established by the Trustees in 1923 and named in honor of the first acting President of the Uni-

versity, is awarded to the junior student having the highest scholarship rank in the University.

The James Stacy Stevens Scholarship, $150, established by the Trustees and named in honor of the first Dean of the College of Arts and Sciences, is awarded to the highest ranking student, resident of Maine, in the junior class in that college, the winner of the Fernald Scholarship being excepted.

The Harold Sherburne Boardman Scholarship, $150, in Technology, in honor of the first Dean of the College of Technology and the President of the University from 1926 to 1934, is awarded on the same terms as the foregoing.

The Leon Stephen Merrill Scholarship, $150, in Agriculture, in honor of the Dean of the College of Agriculture from 1911 to 1933, is awarded as are the foregoing.

The Charles Davidson Scholarship, $150, in the School of Education, in honor of the first professor of education in the University, is awarded as are the foregoing.

The University Scholarships, fifteen, of $150 each, established by the Trustees in 1935, are awarded annually to students of high scholastic standing and intellectual promise whose general record is also satisfactory and who are in need of financial assistance. Preference is given to students residing in the State of Maine.

The Secondary School Contest Scholarships, eight, of $150 each, established by the Trustees in 1931, are awarded annually to the eight entering freshmen who as secondary-school seniors have made the highest average rank in the State Senior Scholarship Contest sponsored by the School of Education, except that only one award may be given to any school. The highest ranking student of the eight selected is awarded a tuition scholarship for four years, the second highest for three years, the third for two years, and the five next in order for one year each. Each scholarship is awarded for one semester and will be continued in the second semester upon evidence of satisfactory work in the University. Only students whose schools enter the Contest and compete according to the rules furnished every year by the University may take the tests.

The Hovey Memorial Scholarships, made available by a fund of $5900, established in 1932 by the Stone and Webster Corporation in honor of the late Francis J. Hovey, are awarded to students in the College of Technology, on the basis of scholastic attainment, character, and general promise. A scholastic standing of at least 3.00 must be attained to be eligible, and must be maintained during tenure. Award is made by the Dean and the heads of departments in the College, subject to the approval of the President, with preference given to students residing in the State of Maine.

THE CHARLES H. HOOD FUND SCHOLARSHIPS, seven, of $200 each, are available annually to men and women students of the College of Agriculture whose intention is to promote farming as a life opportunity. They are awarded by a committee comprising the Dean of the College of Agriculture as chairman, the head of the Department of Animal Industry, and the Treasurer of the University, and are distributed as follows: Two sophomore and two junior scholarships are granted to students whose scholastic standing for the previous year places them in the upper half of their class; and three senior scholarships are granted to students whose scholastic standing for the previous year places them in the upper third of the class. The junior and senior scholarships are further restricted to students specializing in some phase of dairy industry promotion.

THE W. H. BOWKER SCHOLARSHIPS.—The American Agricultural Chemical Company has established two scholarships in honor of W. H. Bowker, one of the first technically trained agricultural college graduates to utilize agricultural research in the manufacture of commercial fertilizers. These scholarships provide $300 each to pay two years' tuition in the College of Agriculture. One scholarship is to be awarded to some boy now studying vocational agriculture in any high school or academy in Aroostook County, or in Patten Academy, Penobscot County. The second scholarship is to be awarded to some boy now studying vocational agriculture in any high school or academy in the state. Each scholarship is to be awarded by a committee comprising the Dean of the College of Agriculture, the Professor of Agricultural Education, and the teachers of vocational agriculture in the section involved.

THE MAINE NORMAL SCHOOL SCHOLARSHIPS, three, of $150 each, are awarded on a competitive basis to Maine normal-school students who, after two years of training for elementary teaching, desire to transfer to preparation at the University for secondary-school teaching. Only those are eligible whose normal-school record places them in the highest decile of their class, whose principal recommends them as having personal qualities which indicate probable success in high-school teaching, and who enter the School of Education as juniors for two years of preparation for that field.

THE GENERAL ALUMNI ASSOCIATION SCHOLARSHIP, $150, established by the Association in 1935, is awarded to a senior student who is son or daughter of a graduate or former student of the University, whose conduct and scholastic record are satisfactory, who has been prominent in extra-curricular activities, and who needs and merits financial aid. The award is made at the close of the junior year by a committee comprising the Chairman of the Committee on Honors and two alumni selected by the President of the General Alumni Association.

The William Emery Parker Scholarship, the income from a one-thousand dollar bond donated by Hosea B. Buck, of the Class of 1893, in memory of William Emery Parker, of the Class of 1912, is awarded annually to that male student of the sophomore or junior class who, in addition to being above the average rank scholastically, shows most clearly those qualities of manliness, honesty, and constructive effort which characterized the college career of the alumnus in whose memory the scholarship is given.

The Charles H. Payson Scholarships, $100 each, were established in 1935 through a gift of $20,000 made by Mrs. Charles H. Payson, of Portland, in memory of her late husband. These are awarded to students in the University whose homes are in Maine and whose high character, qualities of leadership, creditable academic record, and financial need make them worthy of scholarship aid, or to entering students of outstanding merit who without financial assistance could not attend the University.

The Bertha Joy Thompson Scholarships, $100 each, established in 1935 through a bequest of $15,000 by the late Mrs. Bertha Joy Thompson, of Ellsworth, are awarded to students whose qualities of character, scholarship, initiative, and need make them worthy of financial assistance.

The Philip R. Hathorne Scholarship was established in 1936 through a bequest of $5000 by the late David Ernest Hathorne, of Woolwich, Maine, and an additional gift of $2000 by Mrs. Carrie E. Hathorne, as a memorial to their son, Philip R. Hathorne, of the Class of 1923. The income is to be used to help needy students in the Civil Engineering curriculum, preference to be given to natives of Maine.

The James Norris Hart Scholarships, the income of a fund established in 1937 by alumni, faculty, and friends, in honor of Dean Emeritus James Norris Hart, are awarded annually to entering students or upperclassmen who have made satisfactory scholastic records, who have been leaders in extra-curricular activities, and who merit and need financial aid.

The New York Alumni Association Scholarships, two, of $50 each, are annually offered by the New York Alumni Association for the encouragement of proficiency in written and oral expression.

Scholarship No. 1, established in 1905, is offered for excellence in debating by the faculty Committee on Honors, on recommendation of the Department of Public Speaking. In case the effort in debating does not justify the award in any year or years, the amount shall be accumulative.

Scholarship No. 2 is offered annually to an upperclassman in the College of Technology to encourage advancement and proficiency in English as equipment for later professional and civil life. The award, made by a committee of judges selected by the College of Technology and the Department of English, is based chiefly upon a competition in writing held in April, open to juniors and seniors who have satisfactorily

completed Freshman English and a further elective course in English Literature, and have taken or are taking English 5 (6). Consideration is also given to the showing and advancement indicated by the student's grades in his courses in English.

THE KIDDER SCHOLARSHIP, $30, endowed in 1890 by Frank E. Kidder, Ph.D., of Denver, Colorado, a graduate of the University in the Class of 1879, is awarded by the Committee on Honors, with the approval of the President, to a student whose rank excels in his junior year.

THE CHICAGO ALUMNI ASSOCIATION SCHOLARSHIP, $50, established in 1903, is awarded annually to a sophomore pursuing a regular curriculum whose deportment is satisfactory and who has attained the highest rank in his class during the freshman year.

THE PITTSBURGH ALUMNI ASSOCIATION SCHOLARSHIP, $30, established in 1905, is awarded annually to a member of the junior class in the College of Technology whose ability and needs justify the award. The selection is made by the President and the Dean and professors of the College of Technology.

THE JOSEPH RIDER FARRINGTON SCHOLARSHIP, the income from a one-thousand dollar bond, a gift of Arthur M., Edward H., Oliver C., Horace P., and Wallace R. Farrington, all graduates of the University of Maine and sons of Mr. and Mrs. Joseph Rider Farrington, is offered annually in honor of their parents, in the following order of preference: (a) Any direct descendant of Joseph Rider and Ellen Holyoke Farrington, or anyone whom three of such descendants may select; (b) Any student bearing the surname of Farington or Holyoke; (c) A high-ranking student in the College of Agriculture of good character and personality who, in the judgment of the Faculty Committee on Honors, is most deserving of the award.

THE STANLEY PLUMMER SCHOLARSHIP, the income of one thousand dollars, the bequest of Colonel Stanley Plummer, of Dexter, Maine, is awarded annually to a needy and deserving student selected by the Committee on Honors. Students born in Dexter, Maine, shall have preference.

THE PENOBSCOT COUNTY ALUMNI ASSOCIATION SCHOLARSHIPS, two, of $50 each, first given in 1920, are awarded by the President, the executive secretary of the General Alumni Association, and the Committee on Honors to two male students whose homes are in Penobscot County, who are found to be needy and deserving, and whose scholarship and conduct are satisfactory.

THE ELIZABETH ABBOTT BALENTINE SCHOLARSHIP, $75, endowed by the Gamma Chapter of Alpha Omicron Pi, is awarded by the Committee on Honors to a woman member of the sophomore class, on recommendation of the Chapter with the approval of the President, on a basis of scholarship and individual need.

THE CLASS OF 1905 SCHOLARSHIP, the income from a one-thousand dollar bond, donated by members of the Class of 1905, is awarded to a man of the freshman class pursuing a regular curriculum, whose deportment is satisfactory, and who attains the highest rank in the mid-year examinations.

THE CARROL C. JONES SCHOLARSHIP, the net income of a fund of $1000 bequeathed by Minnie E. Jones, of Solon, in memory of her son, Carrol C. Jones, of the Class of 1914, is awarded annually to the student who makes the greatest improvement in his college work during his or her freshman year.

THE OHIO ALUMNI ASSOCIATION SCHOLARSHIP, $50, established in 1934 by the Ohio Alumni Association, is awarded annually to a student whose character, scholarship, and need justify the award.

THE BOSTON ALUMNI ASSOCIATION SCHOLARSHIPS, two, of $75 each, established in 1935, are awarded annually to any deserving student at the University, with preference given to male upperclassmen from Eastern Massachusetts.

THE LINCOLN COUNTY ALUMNI ASSOCIATION SCHOLARSHIP, $50, established in 1935, is awarded annually to an upperclassman whose home is in Lincoln County, on a basis of satisfactory academic record and conduct, qualities of leadership, and financial need.

THE NORTHERN AROOSTOOK ALUMNI ASSOCIATION SCHOLARSHIP, $50, established in 1935, is awarded annually to an upperclass student on a basis of satisfactory scholastic record and conduct, financial need, and qualities of leadership.

THE PHILADELPHIA ALUMNI ASSOCIATION SCHOLARSHIP, $50, established in 1935, is awarded annually to some needy and deserving student, with preference given to the vicinity of Philadelphia.

THE RHODE ISLAND ALUMNI ASSOCIATION SCHOLARSHIP, $50, established in 1935, is awarded to a male student from Rhode Island or that portion of Massachusetts represented by the Association, whose personal and scholastic record is satisfactory and who has been prominent in extra-curricular activities.

THE SOUTHERN CALIFORNIA ALUMNI ASSOCIATION SCHOLARSHIP, $50, established in 1935, is awarded annually to some upperclass student whose scholastic record and conduct are satisfactory, who possesses qualities of leadership, and who is in need of financial aid.

THE SOUTHERN NEW HAMPSHIRE ALUMNI ASSOCIATION SCHOLARSHIP, $75, established in 1935, is awarded to some needy and deserving student, with preference given to the locality represented by the Association.

THE WALDO COUNTY ALUMNI ASSOCIATION SCHOLARSHIP, $50, established in 1935, is awarded in the spring semester to a student from Waldo County, preferably a freshman, whose character and scholarship standing are high, and who needs financial assistance to continue in college. The

award is made by the Committee on Honors, subject to the approval of the Executive Committee of the Association.

The Worcester County Alumni Association Scholarship, $50, established in 1935, is awarded annually to a worthy student from Worcester County, preferably an entering freshman.

The York County Alumni Association Scholarship, $50, established in 1935, is awarded to an upperclassman from York County whose scholastic record and conduct are satisfactory, who possesses qualities of leadership, and who needs and merits financial aid.

The Western Massachusetts Alumni Association Scholarship, $50, established in 1935, is awarded to a needy and deserving student from Western Massachusetts.

The Connecticut Alumni Association Scholarship, $50, established in 1935, is awarded annually to a needy and deserving student, with preference given to students from Connecticut.

The Knox County Alumni Association Scholarship, $75, established in 1936, is awarded annually to a student from Knox County whose record and conduct have been satisfactory and who needs and merits help.

The Somerset County Alumni Association Scholarship, $50, established in 1936, is awarded annually to a needy and deserving senior or junior student from Somerset County.

The Piscataquis County Alumni Association Scholarship, $50, established in 1937, is awarded annually to an upperclass student whose home is in Piscataquis County, who has made a satisfactory record and who needs and merits financial assistance.

The Southern Kennebec Alumni Association Scholarship, $50, established in 1937, is awarded annually to a needy and deserving student whose home is within the area of the Association. Preference is to be given to juniors and seniors.

The Portland Alumnae Association Scholarship, $50, established in 1938 by the Portland Club of University of Maine Women is awarded annually to a deserving upperclass woman whose home is in Cumberland County. The award is made upon the basis of need of financial assistance, satisfactory record and conduct, and evidence of qualities of leadership and of scholastic attainment.

The John M. Oak Scholarship, the income of a fund of $1500, established in 1935 by the estate of Mr. Oak, a graduate of the Class of 1873 and a Trustee of the University from 1908 to 1915, for the advancement of the art of public speaking in the University, is awarded annually to that upperclass student who shall have delivered the best speech of the persuasive type in a contest held for that purpose.

THE CLASS OF 1911 SCHOLARSHIP, the income of a fund of $1000 donated to the University of Maine Foundation in 1936, is awarded annually to an upperclass student of good character and satisfactory conduct and rank, who possesses qualities of leadership and who needs and merits financial aid. Special consideration is given in the award to sons and daughters of members of the Class of 1911.

THE AGRICULTURAL CLUB SCHOLARSHIP, $50, is awarded annually to that male member of the junior class who, in addition to having been active in the Agricultural Club, has maintained a creditable academic record and needs and merits financial aid. Award is made by a committee comprising the Dean of the College of Agriculture as chairman, the Director of Short Courses in the College of Agriculture, and the Accountant of the University.

THE MAINE FARM BUREAU FUND SCHOLARSHIP, $75, is awarded annually to a junior or senior student, resident of Maine, in the College of Agriculture, on a basis of character, scholarship, financial need, and qualities of leadership. The Dean of the College of Agriculture, the Secretary of the Farm Bureau Federation, and the Accountant of the University constitute the committee on award.

THE CLASS OF 1909 FUND.—The income of a fund of $1000 presented to the University of Maine Foundation by the members of the Class of 1909 at their twenty-fifth reunion is to be used for such purposes as the directors of the Foundation may determine.

THE CHI OMEGA SOCIOLOGY PRIZE, $25, is offered annually by the Chi Omega Sorority, in accordance with its national policy, to the woman student in the sophomore or junior class who secures the highest grade in the beginners' course in sociology. Her general deportment and interest in the study of sociology may also be considered in determining the award.

THE PRIZE OF THE CLASS OF 1873, the income of $1000, the gift of Russell W. Eaton, of Brunswick, a member of the Class of 1873, is awarded annually to that member of the sophomore class who is able to show the greatest improvement in mechanical drawing during the first two years of his college course. It is expected that candidates for this prize shall have had no training in mechanical drawing previous to entering the University.

THE ALPHA OMICRON PI ALUMNAE PRIZE, $10, given by the Bangor Alumnae Chapter of Alpha Omicron Pi, is awarded annually to the woman student showing the greatest improvement in her work during her freshman year. The record at the Registrar's office, showing the comparison of grades of the fall semester with those of the spring semester, shall furnish the basis of award.

THE SIGMA MU SIGMA AWARD, $25, is given annually by the honorary society Sigma Mu Sigma to a member of the current sophomore or junior class who shall have completed at least a semester and a half of the intro-

ductory course in General Psychology, on a basis of proficiency, interest, and general promise in the subject. Nominations for the award are made to the president of the society by the instructors in the course about the middle of the spring semester, and it becomes available upon the student's return to the University in the following semester.

The Pale Blue Key Award, $50, is given each year by the Pale Blue Key to some member of the freshman class who needs help, has shown promise in track athletics in his freshman year, and has maintained a satisfactory scholarship standing. The award is made by a committee comprising the president of the Pale Blue Key, the coach of track athletics, and a member of the faculty to be chosen by the club, subject to the approval of the President. The winner will be given the award upon his return to the University in his sophomore year. Applications must be made in writing and sent to either the coach of track athletics or the president of the Pale Blue Key before May 1.

The Henry L. Griffin Prize in English Composition, $10, in honor of the late Rev. Henry L. Griffin, of Bangor, is awarded by the Department of English for excellence in the freshman course in composition. The chief basis of the award is a competition in writing held during the month of April.

The Franklin Danforth Prize, $15, the gift of the Hon. Edward F. Danforth, of Skowhegan, a graduate of the University of the Class of 1877, in memory of his father, Franklin Danforth, is awarded to that member of the senior class in the College of Agriculture who attains the highest standing throughout his curriculum.

The Greek Culture Prize, $15, the gift of the Hon. Edward F. Danforth, of Skowhegan, a graduate of the University in the Class of 1877, is awarded annually to that senior who shall have given evidence of the best appreciation of the spirit of Greek culture. The award is made on recommendation of the Professor of Ancient Civilization.

The Spanish Club Prize, $10, is awarded annually by the Círculo Español for excellence in Elementary Spanish to a freshman student, on the basis of a competitive examination.

The Robert C. Hamlet Prize, $25, established in 1935, in accordance with the will of Mr. Hamlet, a graduate of the University in the Class of 1925, is awarded annually to that student in the University who shall have written the best original one-act play during the year of award. The judges are the Dean of the College of Arts and Sciences, the head of the Department of English, and the president of the Maine Masque.

The Claude Dewing Graton Prize, the income from four shares of stock donated by Mr. Graton, of the Class of 1900, is awarded annually to a regularly enrolled undergraduate student under twenty-five years of age who shall have written the best essay on some current constitutional question.

Entry for competition should be made with the Professor of Government before January 1.

THE MARY ELLEN CHASE PRIZE, $100, given by Dr. Mary Ellen Chase, a graduate of the University in the Class of 1909, is awarded at Commencement to that student in the University who shall have submitted the best piece of original prose dealing with some aspect of the State of Maine. The award is made by a committee of judges selected by the head of the Department of English.

THE ALPHA ZETA SENIOR AWARD, $15, is given annually by the honorary fraternity Alpha Zeta to a high ranking senior member whose college career has been marked by useful service in campus activities.

THE CLASS OF 1908 COMMENCEMENT CUP, donated by the Class of 1908 alumni, is awarded to that graduate class, the largest percentage of whose members register during Commencement Week.

THE TWENTIETH CENTURY CUP, given by the New York Alumni Association, is awarded annually at Commencement to that graduate class in the Twentieth Century group, the largest percentage of whose members register before six o'clock on Alumni Day.

THE FRATERNITY SCHOLARSHIP CUP, presented by the 1910 Senior Skulls Society, was awarded in turn at each Commencement to that fraternity having the highest standard in scholarship for the preceding calendar year. The cup was to become the permanent property of the fraternity to which it should be awarded the greatest number of times through an eleven-year period. The award was renewed in 1921 for an eleven-year period by the 1921 Skulls, and in 1932 by the 1932 Skulls. The first cup was awarded in 1921 to Phi Eta Kappa and the second in 1932 to Lambda Chi Alpha.

THE FRESHMAN SCHOLARSHIP CUP is awarded by the University each spring to that secondary school in Maine having three or more of its graduates in full standing in the freshman class, whose freshman representatives as a group shall have attained the highest scholastic standing for the fall semester preceding. The award was made first in 1931, to Fort Kent High School, in 1932 to Boothbay Harbor High School, in 1933 to Deering High School, in 1934 to South Portland High School, in 1935 to Deering High School, in 1936 to Brewer High School, in 1937 to Hebron Academy, and in 1938 to Edward Little High School.

THE WASHINGTON ALUMNI ASSOCIATION WATCH is presented annually by the Alumni Association of Washington, D. C., to the male member of the graduating class who, in the opinion of the students and the University administration, has done the most for the University during his curriculum. This award is made as the result of a secret ballot by the students, passed upon by the President and the Administrative Committee.

The Portland Alumnae Association Watch is presented annually by the Portland Club of University of Maine Women to the woman member of the graduating class who, in the opinion of the students and the University administration, has done the most for the University during her curriculum. This award is made as the result of a secret ballot by the students, passed upon by the President and the Administrative Committee.

The Agricultural Club Membership Cup, furnished by the Agricultural Club, is engraved each year with the numerals of that undergraduate class which can show the best record of membership in the club.

The Charles Rice Cup was presented in 1921 by the Kappa Sigma Fraternity in honor of Charles Anthony Rice, of the Class of 1917, who was killed in service, to be held for one year by the team winning the Intramural Track Championship.

The Intramural Plaques are presented each year by the Intramural Athletic Association to the fraternity making the best showing in each major intramural sport, and a special plaque is given to that fraternity which makes the best performance in all the sports.

DEGREES

The degree of Bachelor of Arts (B.A.), with specification of the major subject, is conferred upon all students who complete a curriculum in the College of Arts and Sciences.

The degree of Bachelor of Science (B.S.) in the curriculum pursued is conferred upon students who complete the work of four years in the Colleges of Agriculture or Technology according to the requirements prescribed by those Colleges and the University.

The degree of Bachelor of Arts in Education (B.A. in Ed.), Bachelor of Science in Education (B.S. in Ed.), Bachelor of Science in Commercial Education (B.S. in C.Ed.), or Bachelor of Science in Fine Arts Education (B.S. in F.A.Ed.) is conferred upon students who complete the prescribed work in the School of Education.

A minimum residence of one year is required for the attainment of any bachelor's degree. This regulation refers to the senior year. No student will be recommended for a degree who, having been reported to the Committee on Student's Use of English of his college, shall have failed to satisfy the requirements of the committee.

The degrees of Master of Arts (M.A.), Master of Science (M.S.), Master of Arts in Education (M.A. in Ed.), and Master of Science in Education (M.S. in Ed.) are granted for one year's graduate work completed with distinction.

Degrees with Distinction and with Honors

Degrees with distinction are conferred at Commencement for the following attainments in rank:

Seniors in the Colleges of Agriculture and Technology having an average grade of 3.50 or above are graduated with highest distinction, 3.25 to 3.49 with high distinction, and 3.00 to 3.24 with distinction.

Seniors in the College of Arts and Sciences and the School of Education having an average grade of 3.75 or above are graduated with highest distinction, 3.50 to 3.74 with high distinction, and 3.25 to 3.49 with distinction.

The average grade is based on the work of the first three and one-half years, which must include three years of resident study at the University of Maine for students in the Colleges of Agriculture, Arts and Sciences, and Technology and two years in the School of Education for students who have transferred from other institutions. Candidates in the Colleges of Agriculture, Arts and Sciences, and Technology must have completed seven-eighths and in the School of Education three-fourths of the required hours at the end of the fall semester of the senior year. Candidates must take their senior year at the University of Maine.

Seniors in the College of Arts and Sciences who complete satisfactorily the Honors program are graduated with Honors, with High Honors, or with Highest Honors.

STUDENT REGULATIONS

It is assumed that all students entering the University are willing to subscribe to the following: *A student is expected to show, both within and without the University, respect for order, morality, and the rights of others, and such sense of personal honor as is demanded of good citizens.*

The quota of regular studies for each student varies from a minimum of fourteen hours to a maximum of seventeen hours in the College of Arts and Sciences, from a minimum of fourteen hours to a maximum of eighteen hours in the School of Education, and from a minimum of seventeen hours to a maximum of twenty-two hours in the College of Technology and the College of Agriculture except that in the Department of Home Economics the limits are fourteen hours and nineteen hours. In the application of this rule, two or three hours of laboratory work count as one hour.

Each student is expected to be present at every college exercise for which he is registered.

Detailed information about the regulations affecting students is contained in a pamphlet which may be obtained at the office of the Registrar.

Use of Automobiles by Freshmen

Freshmen are not allowed to bring automobiles or motorcycles upon the campus except those who use them to commute daily from their homes.

Notices to Parents

Grade reports are sent to parents of all freshmen at the middle and end of the fall semester and at the end of the spring semester. Grade reports and letters pertaining to probation or trial are sent to parents of all students. Parents are notified whenever a student is placed or continued on probation or continued on trial. They are also notified when the student is removed from probation or trial. While a student's work progresses satisfactorily, semester grade reports are not mailed to parents although a report will be sent at any grade period if desired. Application should be made to the Registrar.

Organization of the University

The University is divided for purposes of administration by the Trustees into two divisions, the academic and the financial. The former is divided into the Colleges of Agriculture, Arts and Sciences, and Technology, the School of Education, and the Maine Agricultural Experiment Station. To the College of Agriculture belongs the Agricultural Extension Service. The policies of the University as a unit are determined by the Board of Trustees, the administrative officers, and the general faculty, but each division regulates those affairs which concern itself alone. In addition to the faculties of the colleges there are the Faculty of Graduate Study and the Faculty of the Summer Session.

College of Agriculture

Curricula in Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Bacteriology, Biological and Agricultural Chemistry, Botany, Dairy Husbandry, Dairy Technology, Entomology, Forestry, Home Economics, Horticulture, Poultry Husbandry, and Wildlife Conservation.

Two-Year Course in Agriculture.

Short Courses in Agriculture.

Farm and Home Week.

Extension Lecture Courses.

College of Arts and Sciences

Major subjects are pursued as integrated fields of study based upon special interests. These may coincide with departmental lines (e.g., Chemistry, Classics, Economics and Sociology, English, German, History and Government, Mathematics and Astronomy, Philosophy, Physics, Psychology, Public Speaking, Romance Languages, and Zoology), or they may embody special curricula of a cultural or pre-professional character (e.g., business, comparative literature, creative writing, dramatics, journalism, law, library work, medicine, politics, and social work).

School of Education

Professional training is offered for secondary-school teachers and prospective principals and supervisors in the public schools, and to a limited extent in elementary education. A curriculum is also offered for the training of commercial teachers who have already received their preliminary training in commercial schools. The degrees Bachelor of Arts in Education, Bachelor of Science in Education, and Bachelor of Science in Commercial Education are offered.

College of Technology

Curricula in Chemical Engineering, Chemistry, Civil Engineering, Electrical Engineering, Engineering Physics, General Engineering, Mechanical Engineering, and Pulp and Paper Technology.

Faculty of Graduate Study

Courses leading to the degrees of Master of Arts, Master of Science, Master of Arts in Education, and Master of Science in Education have been organized in a considerable number of departments. The professional degrees of Chemical Engineer, Civil Engineer, Electrical Engineer, and Mechanical Engineer are granted upon completion of the appropriate curricula.

Maine Agricultural Experiment Station

Offices and principal laboratories at Orono; Highmoor Farm at Monmouth; Aroostook Farm at Presque Isle.

Summer Session

A session of six weeks is maintained for teachers and college students. Work is offered at present in eighteen departments.

College of Agriculture

GENERAL INFORMATION

The College of Agriculture comprises the Departments of Agricultural Economics and Farm Management, Agricultural Education, Agronomy, Animal Industry, Bacteriology and Biochemistry, Botany and Entomology, Forestry, Home Economics, Horticulture, Short Courses, and Extension Service. This college offers to young men and women an opportunity to secure a broad education and thorough training in the sciences and technics relating to the major course of study they may elect to pursue. It aims to prepare them for lives of usefulness as citizens of the State and for effective service in their chosen vocations or professions.

More specific and detailed information concerning the purposes of each major course of study offered by the College will be found in the description of the various curricula.

The four-year curricula in the College of Agriculture require the completion of 147 credit hours, with the exception of those of Forestry and Home Economics, which comprise 153 and 128 hours respectively. In addition each student must accumulate a total of grade points equal to the number of hours required for graduation in the curriculum chosen. These grade points are computed by multiplying each hour of the letter grade by a factor as follows: A by 3, B by 2, C by 1, and D by 0. Upon the completion of the required curriculum, with the necessary number of grade points, the student will be recommended for the degree of Bachelor of Science (B.S.)

On entering either a four-year curriculum in Agriculture or the Two-Year Agricultural Course, a student is required to fill out a practical experience blank. Those who have not had experience in general farming are required to work during at least one summer vacation on some farm approved by the faculty of the College. Before receiving their degrees or certificates candidates must satisfy the faculty that they are familiar with the methods of conducting operations incident to general farming. This does not apply to students majoring in Botany and Entomology, Bacteriology, Biochemistry, Forestry, Wildlife Conservation, or Home Economics.

Physical training is required in each semester of the first two years. No credit toward a degree is allowed for this work. Physical training is not required in the two-year agricultural curriculum.

Students in Agriculture who contemplate entering experiment station chemical work should elect the courses offered in Biochemistry covering the qualitative and quantitative chemical analysis of feeds, fertilizers, and dairy products. They should also elect a preparatory course in quantitative chemical analysis.

Students desiring to specialize in the botanical or entomological aspects of Forestry may offer freshman and sophomore years in Forestry as equivalent to the first two years' work in Agriculture and register in the curriculum in Botany and Entomology during the junior or senior years.

A star (*) before the time designated for a course indicates that three or sometimes more hours of actual work are required to obtain a credit of one hour; a dagger (†) indicates that two hours of actual work are required to obtain a credit of one hour.

REGULAR CURRICULA AND COURSES OF INSTRUCTION

The courses of instruction are organized as follows:

1. Four-Year Major Agricultural Curricula:
   Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Bacteriology, Biochemistry, Botany, and Entomology, Dairy Husbandry, Dairy Technology, Horticulture, and Poultry Husbandry.
2. Four-Year Forestry Curricula:
   Forestry, Wildlife Conservation
3. Four-Year Home Economics Curricula:
   Vocational Sequences
   1. Home Economics Education
   2. Extension-Home Demonstration or 4-H Club Work
   3. Foods and Nutrition
   4. Textiles and Clothing
   5. Development and Training
   6. Special Sequences: Home Economics Journalism, Household Equipment, Social Service, and others formulated to fit individual cases
4. The Two-Year Course in Agriculture
5. Short Courses in Agriculture
6. Farm and Home Week
7. Extension Lecture Courses

THE FOUR-YEAR AGRICULTURAL CURRICULA

The four-year agricultural curricula are designed for those who wish to engage in the business of farming; for those contemplating the special fields of agricultural economics and farm management, agronomy and agricultural engineering, animal husbandry, bacteriology, biological and agricultural chemistry, botany and entomology, dairy husbandry, dairy technology, horticulture, and poultry husbandry; for those desiring to enter Federal or State agricultural research work; for those planning to prepare themselves for the teaching of agriculture and the allied sciences in secondary schools and colleges; and for those seeking to fit themselves to become agricultural extension agents or specialists in any of the various phases of agriculture. In addition to the specific fields mentioned above there are many other opportunities open to the college trained man in the agricultural and associated industries.

Certain studies are fundamental to all work in agricultural lines, and for this reason as many of these subjects as possible are offered in the first year, during which the student is necessarily given no choice of subjects. Beginning with the sophomore year each student should start specialization in one of the following major curricula: Agricultural Economics and Farm Management, Agricultural Education, Agronomy and Agricultural Engineering, Animal Husbandry, Bacteriology, Biochemistry, Botany and Entomology, Dairy Husbandry, Dairy Technology, Horticulture, or Poultry Husbandry; and at the beginning of the junior year he must establish a definite major course of study to be followed until the requirements for graduation shall have been satisfied.

It should be noted that each major curriculum allows a student a number of elective hours. The elective subjects are selected with the advice of the major instructor. In view of the fact that the economic aspects of the agricultural industry have become so vitally important, it is suggested that the student elect subjects in the field of agricultural economics in addition to those which may be required in his major curriculum; particularly is it suggested that he obtain as much information as he possibly can on the marketing of agricultural products. In the case of those students majoring in Agricultural Economics opportunity is offered in the way of elective hours to obtain training in such of the agricultural production subjects as may be desired to furnish a basic production background.

Honor Course in Agriculture

Any student who has obtained an average grade of at least 3.25 in the courses offered by his major department during the first three years of his college course may register for honor courses in his major department or in

an allied department during his senior year, providing his average grade in such allied department is at least 3.25 in all subjects taken in that department. Such courses may be substituted for any elective course, the total number of credit hours not to exceed four. Such honor courses shall be designed especially to promote initiative and organizing ability in the student. The scope of such courses shall constitute a broad survey in the field selected for study and shall in no way be substituted for a thesis. The general plan shall be worked out by the head of the department in which the course is taken, and must be approved by the head of the student's major department.

Curriculum for the Freshman Year for All Students Taking Four-Year Curricula in Agriculture

Fall Semester				*Spring Semester*			
No.		Subject	Cr. Hours	No.		Subject	Cr. Hours
Ag	11	Field Crops, 2 †2	3	An	2	General Animal Husbandry, 2 †2	3
Ch	1a	General Chemistry, 2 †4	4	Bt	2	General Botany, 2 †4	4
Eh	1	Composition	3	Ch	2a	General Chemistry, 2 †4	4
Mt	1	Military, †3	1½	Eh	2	Composition	3
Ph	1	General Poultry Husbandry, 2 †2	3	Ht	2	General Horticulture, 2 †2	3
Zo	1	General Zoology, 2 †4'	4	Mt	2	Military, †3	1½
Pt	1	Physical Education, 2	0	Pt	2	Physical Education, 2	0
			18½				18½

Curriculum for Students Specializing in Agricultural Economics and Farm Management

The curriculum in Agricultural Economics and Farm Management is planned to give the student a broad, comprehensive training in the economic principles of the production and marketing of agricultural products. The training in crops and livestock production, provided in this curriculum, is essential for a clear and proper understanding of the application of the principles of agricultural economics. The student may choose from the elective hours a sufficient amount of work in another department to prepare himself for a position in Agricultural Economics and Farm Management dealing with a particular group of agricultural products. The student upon completing

this curriculum of study may engage in some phase of one of the main divisions in the field, such as agricultural economics, farm management, agricultural marketing including coöperative marketing, agricultural statistics, or agricultural finance. Any one of these divisions offers many opportunities to the graduate.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*		
No.	Subject	Cr. Hours		No.	Subject	Cr. Hours
Ag 1	Soils, 2 *3	3		*Ag 14	Sweet Corn, Beans, and Peas, 1 †2	2
An 3	Care, Feed, Mgt. of Live Stock, 3 †2	4			or	
Bt 45	General Genetics	3		*Ag 16	Forage and Pasture Crops, 1 †2	
Dh 1	General Dairying, 2 †2	3		Bc 8	Agricultural Chemistry	2
Es 1a	Principles of Economics	3		Fm 48	Agricultural Economics	3
Mt 3	Military, †3	2		Mt 4	Military, †3	2
Pt 3	Physical Education, 2	0		Pt 4	Physical Education, 2	0
					Elective	10
		18				19

JUNIOR YEAR

No.	Subject	Cr. Hours		No.	Subject	Cr. Hours
*Ag 15	Potato Production, 2 †2	3		Fm 52	Farm Accounting, 1 *6	3
By 3	Bacteriology	2		Fm 62	Agricultural Business Accounting, 2 *3	
Eh 5	Technical Composition	2		Fm 76	Agr. Marketing	3
Fm 73	Adv. Agr. Economics	2			Elective	12
Fm 75	Agricultural Statistics, 2 *3	3				
	Elective	10 or 7				
		19				18

* Only one course required (Ag 14, 15 or 16).

SENIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Fm 77	Agricultural Finance	2	Fm 74	Farm Management, 3	*3 4
Fm 79	Coöperation in Horticulture	3	†	Marketing	2
Fm 87	Agricultural Prices	3		Elective	14 or 12
	Marketing	2			
	Elective	8			
		18			18

† Not required if taken in fall.

Curriculum for Students Specializing in Agricultural Education

In recent years there has developed an ever increasing demand for men to teach vocational agriculture in secondary schools. This has been brought about in part through Federal legislation which provides special aid to help finance vocational agricultural courses.

Agricultural college graduates who have not taken the special courses designed to fit men for the teaching of vocational agriculture are not permitted to teach agriculture in schools receiving Federal aid for vocational agriculture.

Students who wish to qualify for appointment as teachers of vocational agriculture may do so by taking either a major or a minor in Agricultural Education.

Those who major will follow the prescribed curriculum.

Those who minor must elect all of the courses listed under Agricultural Education. In addition, Ag 41, 42, 43, 44, should be elected.

SOPHOMORE YEAR

Fall Semester

No.		Subject	Cr. Hours
Ag	1	Soils, 2 *3	3
An	3	Care, Feed, Mgt. of Live Stock, 3 †2	4
Bc	1	Organic Chemistry, 2 †2	3
En	21	Gen'l Entomology, 2 †4	4
Py	1	General Psychology, 2 †2	3
Mt	3	Military †3	2
Pt	3	Physical Education, 2	0
			19

Spring Semester

No.		Subject	Cr. Hours
Bc	2	Biochemistry, 3 †4	5
Bc	8	Agricultural Chemistry	2
Fm	48	Agricultural Economics	3
Fy	20	Woodlot Forestry	2
Py	2	General Psychology, 2 †2	3
Mt	4	Military, †3	2
Pt	4	Physical Education, 2	0
		Elective	2
			19

JUNIOR YEAR

No.		Subject	Cr. Hours
Ae	3	Special Methods in Teaching Agriculture	2
Ag	41	School Shop, †2	1
By	3	Bacteriology	2
Dh	1	General Dairying, 2 †2	3
Eh	5	Technical Composition	2
		Elective	8
			18

No.		Subject	Cr. Hours
Ae	2	Practice Teaching	2
Ae	6	Special Methods in Teaching Agriculture	2
Ag	6	Soils and Fertilizers	2
Ag	16	Forage and Pasture Crops, 1 †2	2
Ag	36	Farm Power, 2 *3	3
Ag	42	School Shop, †2	1
Fm	76	Agricultural Marketing	3
		Elective	3
			18

SENIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ae 1	Practice Teaching	2	Ae 8	Teaching Farm Mechanics	2
Ae 5	Supervised Farm Practice	2	Ag 30	Farm Machinery, 2 *3	3
Ag 15	Potato Production, 2 †2	3	Ag 44	School Shop, †2	1
Ag 35	Drainage and Land Reclamation, 2 *3	3	Fm 52	Farm Accounting, 1 *6	3
Ag 43	School Shop, †2	1	Fm 74	Farm Management, 3 *3	4
Fm 73	Advanced Agr. Economics	2		Elective	5
	Elective	5			
		18			18

Curriculum for Students Specializing in Agronomy and Agricultural Engineering

Agronomy in a large sense is a study of the principles underlying modern methods of crop production, plant breeding, adaptation and care of the soil, the source and use of fertilizer materials, the management of the farm, and various phases of agricultural engineering. This curriculum provides a well-rounded training in these subjects, and presents opportunity also for elective studies in stock raising, fruit and vegetable growing, economics, botany, zoology, bacteriology, and kindred subjects.

The graduate having followed this curriculum will find numerous fields of activity open to him; the more common of which are farming for himself, farm management positions, agricultural extension work, experiment-station investigational work, agricultural teaching, and opportunities in the various fertilizer and agricultural-machinery industries.

SOPHOMORE YEAR

Fall Semester

No.	Subject	Cr. Hours
Ag 1	Soils, 2 *3	3
Ag 5	Soil Formation, Erosion and Conservation	3
An 3	Care, Feed, Mgt. of Live Stock, 3 †2	4
Bc 1	Organic Chemistry, 2 †2	3
En 21	Gen'l Entomology, 2 †4	4
Mt 3	Military, †3	2
Pt 3	Physical Education, 2	0
		19

Spring Semester

No.	Subject	Cr. Hours
Ag 16	Forage and Pasture Crops, 1 †2	2
Bc 2	Biochemistry, 3 †4	5
Bc 8	Agricultural Chemistry	2
Fm 48	Agricultural Economics	3
Mt 4	Military, †3	2
Pt 4	Physical Education, 2	0
	Elective	5
		19

JUNIOR YEAR

No.	Subject	Cr. Hours
Ag 15	Potato Production, 2 †2	3
Ag 81	Seminar	1
Bt 53	Plant Physiology, 2 †4	4
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Eh 5	Technical Composition	2
	Elective	3
		18

No.	Subject	Cr. Hours
Ag 6	Soils and Fertilizers	2
Ag 30	Farm Machinery, 2 *3	3
Ag 82	Seminar	1
Bt 30	Plant Ecology, 1 †2	2
Bt 56	Plant Pathology, 2 †4	4
Fm 76	Agricultural Marketing	3
	Elective	3
		18

SENIOR YEAR

No.	Subject	Cr. Hours
Ag 81	Seminar	1
Bt 45	General Genetics	3
By 55	Bacteriology (Soil), 1 †4	3
	Elective	11
		18

No.	Subject	Cr. Hours
Ag 82	Seminar	1
Fm 74	Farm Management, 3 *3	4
	Elective	13
		18

Curricula for Students Specializing in Animal Husbandry, Dairy Husbandry, Dairy Technology, or Poultry Husbandry

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
No.		Subject	Cr. Hours	No.		Subject	Cr. Hours
Ag	1	Soils, 2 *3	3	Ag	16	Forage and Pasture Crops, 1 †2	2
An	3	Care, Feed, Mgt. of Live Stock, 3 †2	4	Bc	2	Biochemistry, 3 †4	5
Bc	1	Organic Chemistry, 2 †2	3	Fm	48	Agricultural Economics	3
Dh	1	General Dairying, 2 †2	3	Mt	4	Military, †3	2
En	21	Gen'l Entomology, 2 †4	4	Pt	4	Physical Education, 2	0
Mt	3	Military, †3	2			Elective	7
Pt	3	Physical Education, 2	0				
			19				19

ANIMAL HUSBANDRY

The curriculum in Animal Husbandry is so arranged that the student receives a comprehensive training in animal breeding, feeding, and management, consideration being given to the four chief groups of farm animals, cattle, horses, swine, and sheep. Because of the importance of crops to the maintenance of farm animals, this curriculum embraces subjects relating to crop production and farm management. The student on completion of this curriculum may engage in the business of animal breeding, furthering the promotion of pure bred livestock utilization; he may enter special phases of animal industry, such as Federal extension, control and investigational lines; he may become the superintendent of an animal breeding establishment; he may engage in college or university teaching of animal husbandry; or he may enter into any one of the great allied industries of animal industry, such as the meat packing business or the commercial feed business. The training he has received has furnished him with the necessary fundamental equipment to enable him to succeed.

JUNIOR YEAR

Fall Semester

No.	Subject	Cr. Hours
An 5	Anatomy of Domestic Animals, 2 †2	3
Bc 9	Animal Biochemistry	2
Bt 45	General Genetics	3
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Eh 5	Technical Composition	2
	Elective	3
		18

Spring Semester

No.	Subject	Cr. Hours
An 6	Physiology of Domestic Animals	3
An 42	Adv. Live Stock Judging and Mgt., †2	1
An 44	Adv. Live Stock Feeding	3
By 52	Bacteriology, 1 †4	3
	Elective	8
		18

SENIOR YEAR

No.	Subject	Cr. Hours
Ag 35	Drainage and Land Reclamation, 2 *3	3
An 7	Animal Hygiene	2
An 55	Animal Nutrition	2
An 63	Seminar	1
	Elective	10
		18

No.	Subject	Cr. Hours
Ag 6	Soils and Fertilizers	2
Ag 30	Farm Machinery, 2 *3	3
An 8	Animal Pathology	2
An 60	Adv. Animal Breeding, 1 †2	2
An 64	Seminar	1
Fm 52	Farm Accounting, 1 *6	3
	Elective	5
		18

DAIRY HUSBANDRY AND DAIRY TECHNOLOGY

These curricula are more specialized than that for Animal Husbandry in that dairy production and dairy manufactures are dealt with more specifically. The student pursuing one or the other of these curricula prepares himself to follow the business of dairy farming from the standpoint of efficient dairy-cattle breeding and efficient milk production, or some other phase of the dairy industry, such as the market-milk business, butter manufacturing, cheese manufacturing, condensed and powdered milk industry, and ice-cream manufacturing, each of which is constantly adding to its personnel young men who have received training similar to that offered in the Dairy Husbandry and Dairy Technology curricula. In addition to the foregoing there are many

opportunities to follow special lines of endeavor, Federal, state, and commercial, all of which require specialized training in dairy production and dairy manufactures.

DAIRY HUSBANDRY

JUNIOR YEAR

Fall Semester

No.	Subject	Cr. Hours
An 5	Anatomy of Domestic Animals, 2 †2	3
Bc 9	Animal Biochemistry	2
Bt 45	General Genetics	3
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Dh 5	Market Milk, 3 †2	4
Eh 5	Technical Composition	2
		19

Spring Semester

No.	Subject	Cr. Hours
An 6	Physiology of Domestic Animals	3
An 42	Adv. Live Stock Judging and Mgt., †2	1
An 44	Adv. Live Stock Feeding	3
By 52	Bacteriology, 1 †4	3
Dh 2	Butter Making, 1 †4	3
	Elective	4
		17

SENIOR YEAR

No.	Subject	Cr. Hours
Ag 35	Drainage and Land Reclamation, 2 *3	3
An 7	Animal Hygiene	2
An 55	Animal Nutrition	2
An 63	Seminar	1
Dh 3	Cheese Making, 2 *6	4
	Elective	6
		18

No.	Subject	Cr. Hours
Ag 6	Soils and Fertilizers	2
Ag 30	Farm Machinery, 2 *3	3
An 8	Animal Pathology	2
An 60	Adv. Animal Breeding, 1 †2	2
An 64	Seminar	1
By 54	Bacteriology (Dairy), 1 †4	3
Fm 52	Farm Accounting, 1 *6	3
	Elective	2
		18

DAIRY TECHNOLOGY

JUNIOR YEAR

Fall Semester

No.	Subject	Cr. Hours
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Dh 5	Market Milk, 3 †2	4
Eh 5	Technical Composition	2
	Elective	7
		18

Spring Semester

No.	Subject	Cr. Hours
By 54	Bacteriology (Dairy), 1 †4	3
Dh 2	Butter Making, 1 †4	3
Dh 4	Condensed Milk, 2 *3	3
Dh 6	Dairy Products Judging, †2	1
Fm 76	Agricultural Marketing	3
	Elective	5
		18

SENIOR YEAR

No.	Subject	Cr. Hours
Dh 3	Cheese Making, 2 *6	4
Dh 51	Dairy Technology	2
Dh 55	Dairy Refrigeration	2
Dh 61	Dairy Tech. Seminar	1
Dh 63	Adv. Dairy Products Testing, †2	1
Fm 85	Marketing Dairy Products	3
	Elective	5
		18

No.	Subject	Cr. Hours
Dh 58	Ice Cream Making, 2 †4	4
Dh 62	Dairy Tech. Seminar	1
Dh 64	Adv. Dairy Products Control, †4	2
Dh 66	Dairy Machinery, †4	2
Fm 62	Agricultural Business Accounting, 2 *3	3
	Elective	6
		18

POULTRY HUSBANDRY

The poultry industry of the United States has come to be recognized as one of the highest-ranking agricultural industries and while it relies for its vastness on the widespread farm flock, nevertheless it offers abundant opportunities to men possessing special training in poultry breeding, feeding, and management. Commercial poultry raising calls for a specialized training in poultry husbandry and is becoming a business of large proportions. Many

openings also occur in poultry extension work, either Federal or state, and also in the poultry-supplies business. The curriculum in Poultry Husbandry furnishes the necessary training for the student contemplating entrance into the fast growing poultry industry.

JUNIOR YEAR

Fall Semester

No.	Subject	Cr. Hours
An 5	Anatomy of Domestic Animals, 2 †2	3
Bc 9	Animal Biochemistry	2
Bt 45	General Genetics	3
By 1	Bacteriology, †6	3
By 3	Bacteriology	2
Eh 5	Technical Composition	2
Ph 3	Exhibition and Production Judging, 1 †2	2
	Elective	1
		18

Spring Semester

No.	Subject	Cr. Hours
An 6	Physiology of Domestic Animals	3
By 52	Bacteriology, 1 †4	3
Fm 76	Agricultural Marketing	3
Ph 2	Poultry Breeding	2
	Elective	7
		18

SENIOR YEAR

No.	Subject	Cr. Hours
Ag 35	Drainage and Land Reclamation, 2 *3	3
Fm 89	Marketing Poultry Products	2
Ph 5	Poultry Feeding	2
Ph 53	Poultry Seminar	1
	Elective	10
		18

No.	Subject	Cr. Hours
Ag 6	Soils and Fertilizers	2
Fm 52	Farm Accounting, 1 *6	3
Ph 4	Incubation and Brooding, 2 †2	3
Ph 6	Poultry Farm Management, 1 †2	2
Ph 8	Poultry Diseases	2
Ph 54	Poultry Seminar	1
	Elective	5
		18

Curriculum for Students Specializing in Bacteriology

This curriculum is designed primarily for those students who desire to fit themselves for laboratory technicians or for research in the field of general

or applied bacteriology. Stress is placed not only upon the agricultural phases of bacteriology, but also upon the sanitary and technical aspects. Students interested in bacteriology as applied to agriculture will take the regular freshman curriculum in Agriculture; others will be guided by the freshman curriculum as outlined below. Two years of German or its equivalent are required.

FRESHMAN YEAR

Fall Semester				*Spring Semester*			
No.	Subject	Cr. Hours		No.	Subject	Cr. Hours	
Ch 1a	General Chemistry, 2 †4	4		Ch 2a	General Chemistry, 2 †4	4	
Eh 1	Composition	3		Bt 2	General Botany, 2 †4	4	
Ms 1	Trigonometry	2		Eh 2	Composition	3	
Ms 3	College Algebra	2		Ms 6	Analytical Geometry	4	
Mt 1	Military, †3	1½		Mt 2	Military, †3	1½	
Zo 1	General Zoology, 2 †4	4		Pt 2	Physical Education, 2	0	
Pt 1	Physical Education, 2	0			Elective	2	
	Elective	2					
		18½				18½	

SOPHOMORE YEAR

Ag 1	Soils, 2 *3	3		Bc 2	Biochemistry, 3 †4	5	
Bc 1	Organic Chemistry, 2 †2	3		Ch 40	Quantitative Analysis, 1 †2, *6	4	
Ch 31	Qualitative Analysis, 2 †2, *6	5		Gm 20	German for Chemists	3	
Gm 19	German for Chemists	3		Mt 4	Military, †3	2	
Mt 3	Military, †3	2		Pt 4	Physical Education, 2	0	
Pt 3	Physical Education, 2	0			Elective	4	
	Elective	3					
		19				18	

JUNIOR YEAR

Fall Semester		*Spring Semester*	
Bc 41 Biochemistry	3	Bc 60 Physiological Chem.	3
Bt 53 Plant Physiology, 2 †4	4	Bc 64 Biochemical Laboratory Methods, †6	3
By 1 Bacteriology, †6	3	By 52 Bacteriology, 1 †4	3
By 3 Bacteriology	2	By 54 Bacteriology (Dairy), 1 †4	3
Ch 21 Introductory Theoretical Chemistry	2	Ch 22 Introductory Theoretical Chemistry	2
Dh 1 General Dairying, 2 †2 3 or Elective 3	3	Gm 22 German for Chemists	3
Gm 21 German for Chemists	3	Elective	2
	20		19

SENIOR YEAR

Bc 57 Biological Colloids	3	By 62 Seminar	1
By 55 Bacteriology (Soil), 1 †4	3	By 102 Problems in Bacteriology, †4 to †8	2 to 4
By 61 Seminar	1	Elective	12 to 14
By 101 Problems in Bacteriology, †4 to †8	2 to 4		
Elective	6 to 8		
	17		17

Curriculum for Students Specializing in Biochemistry

The curriculum in Biochemistry is designed to give the student an opportunity to specialize in chemistry of plant and animal life. With proper choice of electives under the direction of the major instructor students may also pursue special work in agricultural chemistry, particularly in chemistry of the soil and fertilizers.

FRESHMAN YEAR

Fall Semester				*Spring Semester*			
No.	Subject	Cr. Hours		No.	Subject	Cr. Hours	
Ag 11	Field Crops, 2 †2	3		An 2	General Animal Husbandry, 2 †2	3	
Ch 1a	General Chemistry, 2 †4	4		Bt 2	General Botany, 2 †4	4	
Eh 1	Composition	3		Ch 2	General Chemistry, 2 †4	4	
Mt 1	Military, †3	1½		Eh 2	Composition	3	
Ph 1	General Poultry Husbandry, 2 †2	3		Ht 2	General Horticulture, 2 †2	3	
Zo 1	General Zoology, 2 †4	4		Mt 2	Military, †3	1½	
Pt 1	Physical Education, 2	0		Pt 2	Physical Education, 2	0	
		18½				18½	

SOPHOMORE YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ag 1	Soils, 2 *3	3	Bc 2	Biochemistry, 3 †4	5
Bc 1	Organic Chemistry, 2 †2	3	Ch 40	Quantitative Analysis, 1 †2, *6	4
Ch 31	Qualitative Analysis, 2 †2, *6	5	Gm 20	German for Chemists	3
Gm 19	German for Chemists	3	Mt 4	Military, †3	2
Mt 3	Military, †3	2	Pt 4	Physical Education, 2	0
Pt 3	Physical Education, 2	0		Elective	4
	Elective	3			
		19			18

JUNIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bc 9	Animal Biochemistry	2	Bc 60	Physiological Chem.	3
Bc 53	Agricultural Analysis, †6	3	Bc 64	Biochemical Laboratory Methods, †6	3
By 1	Bacteriology, †6	3	By 52	Bacteriology, 1 †4	3
By 3	Bacteriology	2	Ch 22	Introductory Theoretical Chemistry	2
Ch 21	Introductory Theoretical Chemistry	2	Gm 22	German for Chemists	3
Gm 21	German for Chemists	3		Elective	4
	Elective	4			
		19			18

SENIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bc 57	Biological Colloids	3	Bc 102	Research, †8	4
Bc 101	Research, †8	4		Elective	14
	Elective	11			
		18			18

Curricula for Students Specializing in Botany and Entomology

This curriculum is designed for those preparing themselves to engage in research or to enter the field of teaching in either the pure or applied science of botany or entomology. Students interested in botany and entomology as applied to agriculture or forestry may transfer from either the Agriculture or Forestry curriculum at the beginning of the sophomore year and from the Forestry curriculum at the beginning of the junior year. Others will be guided by the freshman curriculum outlined below. A reading knowledge of French or German is required.

FRESHMAN YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ch 1a	General Chemistry, 2 †4	4	Bt 2	General Botany, 2 †4	4
Eh 1	Composition	3	Ch 2a	General Chemistry, 2 †4	4
Md 1	Fund. of Drafting, †4	2	Eh 2	Composition	3
Ms 1	Trigonometry	2	Md 2	Elementary Machine Drafting, †4	2
Ms 3	Algebra	2			
Mt 1	Military, †3	1½	Mt 2	Military, †3	1½
Zo 3	Animal Biology, 2 †4	4	Zo 4	Animal Biology, 2 †4	4
Pt 1	Physical Education, 2	0	Pt 2	Physical Education, 2	0
		18½			18½

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
No.	Subject	Cr.	Hours	No.	Subject	Cr.	Hours
Bc 1	Organic Chemistry, 2 †2		3	Bc 2	Biochemistry, 3 †4		5
Bt 33	Forest Botany (Dendrology), 2 †4		4	Gm 2	Elementary German		4
En 21	Gen'l Entomology, 2 †4		4	Mt 4	Military, †3		2
Gm 1	Elementary German		4	Pb 2	Public Speaking		2
Mt 3	Military, †3		2	Pt 4	Physical Education, 2		0
Pt 3	Physical Education, 2		0		Elective		5
	Elective		2				
			19				18

JUNIOR YEAR

No.	Subject	Cr.	Hours	No.	Subject	Cr.	Hours
Bt 53	Plant Physiology, 2 †4			Bt 56	Plant Pathology, 2 †4		
	or		4		or		4
Zo 15	Comparative Anat. 2 †4			Zo 16	Comparative Anat., 2 †4		
Bt 57	Taxonomy of Vascular Plants, 2 †4		4	By 2	Bacteriology, †6		3
By 3	Bacteriology		2	Ce 14	Historical Geology		3
Eh 5	Technical Composition		2	Eh 10	Modern Literature		2
Gm 3	Short Story		3	Gm 4	Short Story		3
	Elective		4		Elective		3
			19				18

SENIOR YEAR

No.	Subject	Cr.	Hours	No.	Subject	Cr.	Hours
*Bt 35	Plant Anatomy, 2 †4		4	Bt 30	Plant Ecology, 1 †2		2
Bt 45	General Genetics		3	Bt 46	Genetics Laboratory, †4		2
Bt 59	General Mycology, 2 †4		4		Elective		13
Es 1a	Prin. of Economics		3				
	Elective		5				
			19				17

* Entomology students elect.

Curriculum for Students Specializing in Horticulture

The curriculum in Horticulture is intended, not only to provide a good preparation for engaging directly in fruit growing, vegetable gardening, ornamental horticulture, or other horticultural industry, but also to make possible to the graduate a reasonably direct entrance into several professional occupations which may require the additional preparation of a period of intensive graduate study. Prominent among the positions occupied by graduates in horticulture are those of investigators in experiment stations, teachers in colleges and secondary schools, extension agents, and state and Federal employees in the investigational, inspection, and regulatory services.

Although but a single curriculum in horticulture appears in the catalog, tending to place emphasis on a general training in horticulture, the student who wishes to specialize in one division of horticulture may do so by combining a careful selection of elective courses with the completion of one of the following groups as a requirement: (1) fruit culture—Horticulture 1, 9, 10, 53, 55, and Farm Management 74; (2) vegetable gardening—Horticulture 10, 21, 25, and Farm Management 74; (3) floriculture and ornamental horticulture—Engineering Drafting 1 or 9, Horticulture 3, 6, 7, 8, and 15. Problems in Horticulture, Courses 11 and 12, afford still further opportunity for progressive specialization.

Conflicts may largely be avoided by scheduling elective courses in this sequence: sophomore year, Courses 1, 8, 9, and Engineering Drafting 9; sophomore or junior year, Course 4; junior year, Courses 3, 7, and 10; junior or senior year, Courses 53, 54, and 55; senior year, Courses 11, 12, 15, 21, 25, and Farm Management 74.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
No.	Subject	Cr. Hours		No.	Subject	Cr. Hours	
Ag 1	Soils, 2 *3	3		Bc 2	Biochemistry, 3 †4	5	
Bc 1	Organic Chemistry, 2 †2	3		Ag 6	Soils and Fertilizers	2	
En 21	Gen'l Entomology, 2 †4	4		Fm 48	Agricultural Economics	3	
Mt 3	Military, †3	2		Mt 4	Military, †3	2	
Pt 3	Physical Education, 2	0		Pt 4	Physical Education, 2	0	
	Elective	7			Elective	7	
		19				19	

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ag 35	Land Drainage and Reclamation, 2 *3	3	Bt 56	Plant Pathology, 2 †4	4
Bt 53	Plant Physiology, 2 †4	4	Ht 6	Landscape Gardening, 2* 3	3
By 3	Bacteriology	2	Ht 20	Vegetable Gardening, 2† 2	3
Eh 5	Technical Composition	2		Elective	9
	Horticulture	5			
	Elective	3			
		19			19

Ht 14 Summer Practice (elective) ..... 4 credit hours

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bt 45	General Genetics	3	Ht 52	Seminar	1
Ht 51	Seminar	1		Horticulture	4
	Horticulture	6		Elective	12
	Elective	7			
		17			17

CURRICULA IN FORESTRY

Two curricula are offered in the Forestry Department, both sequences leading to the degree of Bachelor of Science. Courses offered during the first year in either of these sequences are the same.

Curriculum for the Freshman Year for All Students Taking Four-Year Curricula in the Department of Forestry

Fall Semester				*Spring Semester*			
No.		Subject	Cr. Hours	No.		Subject	Cr. Hours
Ch	1a	General Chemistry, 2 †4	4	Bt	2	General Botany, 2 †4	4
Eh	1	Composition	3	Ch	2a	General Chemistry, 2 †4	4
Fy	1	Elements of Forestry	2	Eh	2	Composition	3
Md	1	Fund. of Drafting, †4	2	Fy	2	Elements of Forestry	2
Ms	9	Trigonometry and its Applications	2	Md	2a	Drafting, †4	2
Mt	1	Military, †3	1½	Ms	10	Trigonometry and its Applications	2
Zo	1	General Zoology, 2 †4	4	Mt	2	Military, †3	1½
Fy	47	Orientation, 1	0	Fy	48	Orientation, 1	0
Pt	1	Physical Education, 2	0	Pt	2	Physical Education, 2	0
			18½				18½

CURRICULUM IN FORESTRY

A four-year undergraduate curriculum in Forestry is offered. In addition four courses from this undergraduate curriculum are open to graduate credit to students majoring in other curricula. A limited number of graduate students will be accepted for graduate work upon completion of the four-year curriculum or its equivalent at another university. The Forestry curriculum follows. It is arranged to meet the requirements of the profession of forestry for forestry instruction in the United States. Completion of the curriculum leads to the degree of Bachelor of Science. It will enable the graduate to qualify for technical and administrative positions in the profession, and will admit to advanced standing in postgraduate schools of forestry if further and more advanced work is desired. It will also render a student eligible for the Civil Service examinations for the position of Junior Forester in the United States Forest Service, and other Federal bureaus employing foresters. Owing to the wide field covered by the curriculum, it offers an excellent basis for a broad and liberal education.

The first two years are devoted very largely to fundamental and pretechnical subjects which are basic for a proper understanding of the more highly specialized work in technical subjects during the last two years. Instruction in the Department consists of lectures, recitations, laboratory and field work, the latter consuming a considerable portion of the scheduled time.

A camp course of six weeks' practical experience is required of all men in the summer between the sophomore and junior years. This work is offered at a camp operated by the Department, where students are able to observe large forest areas under permanent management and large private manufacturing plants specializing in the utilization of various kinds of forest products. A second camp course of eight weeks' practical experience is required of all seniors at camps owned and operated by the Forestry Department and located on Indian Township, near Princeton, Maine.

SOPHOMORE YEAR

Fall Semester

No.	Subject	Cr. Hours
Ag 5	Soil Formation and Conservation	3
Bt 33	Forest Botany (Dendrology), 2 †4	4
Ce 1	Plane Surveying	2
Ce 3	Field Work and Plotting, *9	3
Es 1b	Principles of Economics	2
Fy 3	Logging	2
Mt 3	Military, †3	2
Pt 3	Physical Education	0
		18

Spring Semester

No.	Subject	Cr. Hours
Pt 3	Physical Education, 2	0
Bt 34	Forest Botany, 1 *3	2
Eh 10	Modern Literature	2
En 22	Forest Entomology, 2 †4	4
Es 2b	Principles of Economics	2
Fy 4	Administration and Protection	4
Fy 14	Forest Products	2
Mt 4	Military, †3	2
Pt 4	Physical Education, 2	0
		18

SUMMER CAMP

No.	Subject	Cr. Hours
Ce 7s	Highways and Railroads	2
Fy 35s	Silviculture	2
Fy 37s	Forest Mensuration	1
Fy 39s	Forest Products	1
		6

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ag 3	Soils (Forest), 2 *3	3	Fy 6	Forest Mensuration, 2 *3	3
Bt 35	Plant Anatomy, 2 †4	4	Fy 8	Silvics	3
Eh 5	Technical Composition	2	Fy 10	Nursery Practice, last 9 weeks, *6	1
Fy 5	Forest Mensuration, 2 *3	3	Fy 12	Seeding and Planting	2
	Elective	6		Elective	10
		18			19

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
	First 9 weeks		Bt 42	Forest Pathology, 2 †4	4
Fy 7	Lumber Manufacture	2	Fy 16	Wood Technology, 1 †2	2
Fy 9	Wood Preservation	1	Fy 52	Policy and Economics	4
Fy 51	Regional Silviculture	2	Fy 56	Forest Management	2
Fy 53	Forest Finance, 3 †2	2		Elective	7
Fy 55	Forest Management	2			
	Last 9 weeks				
Fy 41	Practice of Forestry, *48	9			
		18			19

CURRICULUM IN WILDLIFE CONSERVATION

A four-year undergraduate curriculum is offered in Wildlife Conservation and a limited number of graduate courses are available to students with sufficient undergraduate background. The four-year undergraduate curriculum in the first year is the same as that for Forestry.

This sequence is arranged to cover a wide field of activities including the management of all types of game, waterfowl, fish and fur bearers on Federal, state, and privately owned land. It includes basic training in the artificial propagation of fish and game, and conservation of non-game species.

This curriculum prepares men for management and extension work in Federal and state departments concerned with the utilization of natural resources, for teaching in colleges and universities, and for research and ex-

perimental work in Federal, state, and college experiment stations. Graduates are eligible for Civil Service examinations prepared by the Federal Government.

The first two years are devoted largely to fundamental and pretechnical subjects which are basic for the applied courses offered in the last two years. A camp course of six weeks' practical experience is required of all undergraduates between the sophomore and junior years. This work is offered at a camp conducted by the Department where forest areas are being operated under a system of wildlife management.

SOPHOMORE YEAR

Fall Semester

No.	Subject	Cr. Hours
Bt 33	Forest Botany (Dendrology), 2 †4	4
Ce 1	Plane Surveying	2
Ce 3	Field Work and Plotting, *9	3
Fy 13	Forest Protection	2
Mt 3	Military, †3	2
Zo 9	Ichthyology, 2 †4	4
Pt 3	Physical Education, 2	0
		17

Spring Semester

No.	Subject	Cr. Hours
Bc 4	Organic Chemistry, 3 †2	4
Bt 36	Taxonomy, 2 †4	4
En 26	Entomology, 2 *3	3
Mt 4	Military, †3	2
Ph 10	Incubation and Brooding of Game Birds, 1 †2	2
Zo 10	Ornithology, 2 †4	4
Pt 4	Physical Education, 2	0
		19

SUMMER CAMP

No.	Subject	Cr. Hours
Fy 35s	Silviculture	2
Fy 37s	Forest Mensuration	1
Fy 45s	General Ecology	3
		6

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Bc 5	Biochemistry, 3 †2	4	Eh 6	Technical Composition	2
Bt 41	Biotic Relationships, 2 *3	3	Fm 48	Agricultural Economics	3
Bt 45	Genetics	3	Fy 22	Mapping, 1 *6	3
By 1	Bacteriology, †6	3	Fy 24	Game Food and Cover Planting, 1 *3	2
By 3	Bacteriology	2	Zo 14	Animal Parasitology, Elective	6
Zo 13	Mammology, 2 †4	4			
		19			19

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
	First 9 weeks		Fy 52	Policy and Economics	4
An 9	Disease and Parasite Control (in Wildlife), 3 *3	2	Zo 20	Fish Culture, 2 *3	3
Fy 55	Forest Management	2	Zo 22	Animal Ecology	3
Fy 57	Game Management	2		Elective	9
Zo 19	Fish Culture	1			
Zo 21	Animal Ecology	1			
	Last 9 weeks				
Fy 41	Practice of Forestry, *48	9			
		17			19

CURRICULA IN HOME ECONOMICS

The Department of Home Economics offers curricula based on a consideration of the problems of the contemporary home and responsibilities of the modern home maker. The basic curriculum requires foundation work in the physical and social sciences, and Home Economics courses applying these sciences to problems of the home. In addition the student is required to complete a sequence of fifteen or more hours based on interest in a specialized subject-matter field or in a particular vocation. These sequences are listed below. As it is impossible in the limited time of classroom and laboratory to develop to a point of skill all the techniques necessary to success in a vocation,

the student is expected to make provision during her vacations, or during the school year, for developing the kinds and degrees of skill essential to beginning the vocation she has selected.

Each curriculum includes in its total of 128 hours, 17 to 40 hours of electives in any department of the University for which the student is adequately prepared. At least half of the total program must be in courses other than those essentially technical or professional.

Basic Curriculum in Home Economics

Required of all students majoring in the department.

FRESHMAN YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
Ch 5	Inorganic Chemistry, 2 †4	4	Bc 4	Organic Chemistry, 3 †2	4
Eh 1	Composition	3	Eh 2	Composition	3
Gc 1	Intro. to Soc. Sci.	3	Gc 2b	Intro. to Soc. Sci.	3
He 1	Intro. to Home Economics	3	He 2	Clothing Selection Problems, 2 †2	3
He 3	Design, 1 †4	3	He 14	Child Development	3
Pe 1	Physical Education, 2	0	Pe 2	Physical Education, 2	0
		16			16

SOPHOMORE YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
He 5	Foods, 2 †4	4	He 6	Foods, 2 †4	4
Py 1	General Psychology, 2 †2	3	Py 2	General Psychology, 2 †2	3
Sequence and Elective		9	Zo 12	Human Physiology, 3 †4	5
Pe 3	Physical Education, 2	0	Sequence and Elective		4
			Pe 4	Physical Education, 2	0
		16			16

JUNIOR YEAR

Fall Semester			*Spring Semester*		
No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
By 3	Bacteriology	2	By 10	Sanitation, first 12 weeks	2
By 5	Bacteriology, †2	1	He 10	Home Care of Sick	1
Sy 1	General Sociology	3	He 4	The House, 1 †4	3
Sequence and Elective		10	Sequence and Elective		10
		16			16

SENIOR YEAR

No.	Subject	Cr. Hours	No.	Subject	Cr. Hours
He 11	Household Management	2	*He 22	Household Admin.	3
Ee 5a	Household Equipment	3	He 54	Family Econ. Problems	3
Sequence and Elective		11	*He 70	Survey Examination	1
			Sequence and Elective		9
		16			16

* May be taken in the fall as He 21 and He 69.

Sequences

HOME ECONOMICS EDUCATION. 35-37 hours.

This sequence fulfills the requirements for State certification of junior and senor high-school teaching of Home Economics and of certain science courses, and qualifies the student to receive, after a year of successful teaching experience, the vocational certificate which makes her eligible to teach in those schools which offer vocational programs with Federal support. Students who are accepted for Course 75 (76), and complete it successfully, qualify for the vocational certificate without further experience.

Requirements are as follows:

Bc 5	Biochemistry	4
Ed 65 (66)	Educational Measurements	3
He 7; 8 (or 9)	Clothing Construction Problems	2-4
He 51; 52b	Advanced Clothing	6

He 56	Home Economics Education	3
He 57a	Food Preservation	1
He 57b	Demonstrations	1
He 63	Nutrition	2
He 66	Dietetics	2
He 71 (72)	Supervised Teaching	2
*He 73. 74	Supervised Field Teaching	4
He 78	Advanced Home Economics Ed.	2
He 85 (86)	School Lunch	1
Pb 1 (2)	Public Speaking	2
*He 75 (76)	Apprentice Teaching, may be substituted by permission.	

There is a demand for teachers prepared and certified to handle other high-school subjects in combination with Home Economics. Students who take this sequence are advised that it may be wise to choose their electives, in order to prepare themselves for certification in an additional subject. Pj 2, 4, Summer Project, and He 18 Applied Design are also recommended.

EXTENSION TEACHING. 32-34 hours.

This sequence prepares the student for work as a home demonstration agent or a 4-H Club agent.

Bc 5	Biochemistry	4
Eh 28	Departmental or Feature Writing	3
He 7; 8, or 9	Clothing Construction	2-4
He 51, 52a, 52b	Advanced Clothing	9
He 56	Home Economics Education	3
He 57a	Food Preservation	1
He 57b	Demonstration	1
He 63	Nutrition	2
He 65	Dietetics	2
He 81	Institutional Foods	3
Pb 1 (2)	Public Speaking	2

Further work in home economics, especially in institutional foods and in clothing, in education, in journalism, and in the social sciences is strongly recommended. Since 23 hours of this sequence is identical with the teaching sequence, and since either field is good experience for the other, students often combine this with the Home Economics Education sequence.

FOOD AND NUTRITION. 22 hours.

This sequence is offered for students preparing for positions as hospital dietitians, Red Cross nutritionists, research workers in foods and nutrition, or home economists in commercial foods work. It meets the requirement of the American Dietetics Association for admission to student dietitianship in hospitals offering a Class A training course.

Bc 5	Biochemistry	4
*Bc 53 or 61	Biochemistry	3
*He 56	Home Economics Education	3
He 63 (64)	Nutrition	2
He 65	Dietetics	2
*He 67	Nutrition in Abnormal Conditions	2
*He 81, 84, 87	Institutional Management	6

*For students preparing for commercial foods positions or for research, appropriate substitutes may be made for starred courses.

TEXTILES AND CLOTHING. 19-21 hours.

For students interested in the clothing, textile, or decoration field as designers, buyers, or advertising copy writers.

He 7, 8 or 9	Clothing Construction	2-4
He 17	Applied Design	2
He 43 (44)	House Furnishing	3
He 51, 52	Advanced Clothing	5
He 61	History of Costume	1
*He 91, 92	Costume Design	6

*Appropriate substitutions may be made for starred courses.

Students who select this sequence are advised to include as electives such subjects as projects and special problems in clothing, and courses in psychology, public speaking, theatre, French, art history, history and journalism.

CHILD DEVELOPMENT. 20 hours.

For students preparing for work in the rapidly expanding fields of nursery school and parental education.

Bc 5	Biochemistry	4
He 57c (58c)	Nursery School Meals	1
He 59 (60)	Special Problems in Child Development	2
He 63 (64)	Nutrition	2
He 65	Dietetics	2
Py 67, 71, 72, 81	(Six hours selected)	6
Sy 81	Marriage and The Family	3

Students are advised to include courses in public speaking, in the appreciation of art and music, and additional zoology, English, education, and sociology. Arrangements are made for two students each year to do one semester's work in this field at the Merrill-Palmer School, Detroit, Michigan. The work will be accepted as applying on basic and sequence requirements.

General Home Economics

For students who wish an adequate basic training in home economics, but are not interested in organizing their programs about the requirements of any paid vocations.

Sixteen hours of advanced home economics courses in addition to those required in the basic curriculum.

Other Sequences

For students whose vocational needs are not met by these sequences, others may be arranged. They will consist of selected advanced Home Economics courses and related work in other departments.

Special Students in Agriculture

Persons not candidates for a degree who desire to take special studies may be permitted to do so, if, upon examination, they give satisfactory evidence that they are prepared to pursue them. This privilege is intended only for students of unusual maturity (at least twenty-one years of age) or previous advancement in particular subjects, and not for those who are incompetent to pursue a regular course. If they subsequently desire to become candidates for a degree, they will be required to meet all the entrance requirements.

The annual expenses for courses of one year or more are the same as those for students in the four-year curricula.

TWO-YEAR COURSE IN AGRICULTURE

This is a course of training for young men who wish to become practical farmers, farm superintendents, dairymen, poultrymen, fruit-growers, or gardeners, but who cannot devote time to full high-school or college training. It is also open to women.

The same equipment is used as in the four-year curricula, but the work is more elementary in nature. Most of the classes are separate and distinct from the four-year classes.

Students who have satisfactorily completed two years of high-school work are eligible for registration.

There are no entrance examinations required of those who desire to enter the Two-Year Course.

On completion of the course a certificate is awarded those who have satisfactorily met the requirements.

Curriculum for Two-Year Course in Agriculture

FIRST YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Animal Husbandry, 2 †2	3	Carpentry, †4	2
*Business Arithmetic	2	Dairy Husbandry, 2 †4	4
Farm Botany, 1 †2	2	English	2
Farm Chemistry	2	Farm Economics	2
Farm Crops, 2 †2	3	Fruit Growing, 2 †2	3
Forge Work, *3	1	Poultry Husbandry, 2 †2	3
*Fruit Handling, 2 †2	3	Soils and Fertilizers, 3 *3	4
*Potato Production, 2 †2	3		
Poultry Husbandry, 2 †2	3		
	19 or 20		20

*Two of these three subjects to be elected with approval of the Director of Short Courses.

SECOND YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Animal Husbandry, 2 †2	3	Animal Husbandry, 3 †2	4
Diseases of Farm Animals	3	English	2
English	2	Farm Crops, 2 †2	3
Farm Engineering and Mechanics, 2 *3	3	Farm Machinery, 2 *3	3
Farm Insects, 1 †2	2	Forestry (Fy 20)	2
Farm Management, 2 *3	3	Marketing Farm Products	3
Poultry Management	2	Small Fruit Culture and Plant Propagation, 2 †2	3
Vegetable Growing, 2 †2	3		
	21		20

A description of subjects offered will be found on page 153.

SHORT COURSES IN THE COLLEGE OF AGRICULTURE

Short Courses are offered to the large number of young men and women and adults who are engaged or about to engage in agricultural or homemaking pursuits and who desire to devote a short time during the winter months to the securing of definite instruction along the line of their special interests.

Courses of three weeks' duration are available in Dairy Production, Poultry Raising, Potato Production, and other subjects. Courses of shorter duration in other specialized subjects are also available.

Applicants for admission must be at least sixteen years of age and have had a good common-school education. Information concerning short courses may be secured by addressing the Director of Short Courses, College of Agriculture.

FARM AND HOME WEEK

There are a large number of people who cannot come to the College for a great length of time, but who desire a few days of practical instruction. To reach and accommodate these, "Farm and Home Week" is held. Lectures on practical agricultural subjects are given morning, afternoon, and evening. Practical demonstrations occupy a part of each afternoon. Besides the practical subjects discussed, one or more sessions are given up to problems of

rural betterment. Considerable emphasis is placed on agricultural marketing problems peculiar to Maine. The homemaking program includes the various phases of home management and is of interest to both rural and urban homemakers. Dates and programs may be secured each year by addressing the College of Agriculture.

THE EXTENSION SERVICE

The Extension Service is organized as a department of the College of Agriculture. It operates under the provisions of the Smith-Lever and Capper-Ketcham Acts, receiving its funds from State and Federal sources.

Its personnel is made up of two groups of agents. One group, the County Extension Agents, consists of agricultural agents, home demonstration agents, and club agents, having their headquarters within the counties in which they serve. The other group, the State Agent force, consists of a limited number of specialists and leaders having their headquarters at the University but working with and assisting the County Extension Agents.

The Extension Service through these men and women gives direct assistance to people living on the farms and in the rural and urban homes of this state. The Farm Bureau, an organization having a membership of more than 10,000 men and women, coöperates with the Extension Service in the determination and development of its county and community programs of work.

Extension Lecture Courses

Lectures in these courses are given under the auspices of granges, clubs, societies, and other gatherings by the members of the agricultural faculty.

A complete list of the lectures will be forwarded on request.

Correspondence Service

It is recognized that a letter is a poor substitute for a personal conference in dealing with perplexing problems with which people are constantly confronted in the vocations of agriculture, forestry, and home economics, but the teachers in all departments of the College are always ready to furnish information dealing with these problems and thus render the greatest possible service to the people of the State. The College of Agriculture, therefore, welcomes inquiries on practical agricultural, forestry, and home economics topics. Extension bulletins dealing with different phases of these subjects are published at frequent intervals throughout the year and will be sent without cost to persons applying for them. A list of bulletins and circulars available for distribution will be forwarded on request.

Departments of Instruction

NOTE.—A star (*) before the time designated for a course indicates that three or sometimes more hours of actual work are required to obtain credit for one hour; a dagger (†) indicates that two hours are required to obtain this credit.

Courses designated by an odd number are given in the fall semester; those designated by an even number, in the spring semester.

When a course is offered in the first semester and also repeated in the second, it is designated by two numbers, the second of which is in parenthesis.

Two-semester courses designated with a period between the two numbers (e.g., 1. 2) may be taken either semester; when a semicolon appears between the two numbers (e.g., 1; 2), the first semester is prerequisite to the second; and when a dash appears between the two numbers (e.g., 1-2), both semesters must be taken to obtain credit.

Courses numbered 1-50 are for undergraduates only; courses numbered 51-100 are for graduates and undergraduates; courses numbered above 100 are primarily for graduates.

AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

PROFESSOR MERCHANT; PROFESSOR JONES; ASSOCIATE PROFESSOR DOW; ASSISTANT PROFESSOR NIEDERFRANK

48. AGRICULTURAL ECONOMICS.—An introductory course in the principles of economics as applied to agriculture. Consideration given to the development of commercial agriculture, price-making forces, production factors, land policy, land tenure, foreign trade, taxation, credit, marketing, and farm management. This course is intended to give a broad foundation training in this subject. *Three hours a week. Three credit hours.*

MR. JONES

52. FARM ACCOUNTING.—All forms of farm records; farm inventories, cash accounts, single-enterprise cost accounts, complete farm-cost accounting system, and miscellaneous records. Special emphasis is given to the interpretation of results and their practical application in the management of farms. Classroom, *one hour a week;* laboratory, **six hours a week. Three credit hours.*

MR. JONES

62. Agricultural Business Accounting.—This course includes accounting methods for different types of farm business organizations, such as coöperative marketing associations, creameries, cheese factories, Grange stores, and other similar organizations. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Niederfrank

65. Forest Accounting.—This course includes accounting methods for the different types of logging and lumbering operations. It involves problems in cost and income factors, and profit and loss statements of various kinds of forest operations. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Niederfrank

73. Advanced Agricultural Economics.—An advanced course in some of the more important economic problems facing agriculture, such as effects of various governmental policies, agricultural relief, production control, protective tariff, foreign trade and competition, agricultural organization, tenancy, and similar problems. Prerequisite, Course 48. *Two hours a week. Two credit hours.* Mr. Jones

74. Farm Management.—Farming as a business; size of business; balance; production rates; labor efficiency; crop rotations; machinery; farm layout; building arrangement; choosing and buying a farm; ways of starting to farm; and study of farm organization and management of specific farms in the vicinity. Classroom, *three hours a week;* laboratory, **three hours a week. Four credit hours.* Mr. Jones

75. Agricultural Statistics.—Course consists of practical problems in frequency distribution; averages; measurements of dispersion; measurements of trends; seasonal variations and cyclical fluctuations; simple index numbers; simple linear and non-linear correlations; and standard and probable errors. Classroom, *one hour a week;* laboratory, **three hours a week. Two credit hours.* Mr. Merchant

76. Agricultural Marketing.—The first part of the course deals with the economic principles of the present marketing structure and its operation. The latter part involves the study of distribution and marketing of potatoes, apples, wheat, wool, hay, peaches, tobacco, truck crops, dairy products, poultry and poultry products, beef cattle, sheep, and hogs. *Three hours a week. Three credit hours.* Mr. Merchant

77. Agricultural Finance.—The farmers' credit needs are considered. Sources of credit available to farmers and conditions under which loans are made. Special attention is given to the study of the Farm Credit Administration, banks, and individual creditors, as they affect credit conditions in the various farming sections in Maine. *Two hours a week. Two credit hours.* Mr. Merchant

78. Marketing Potatoes.—A specialized course in the marketing of potatoes emphasizing trends in production, regional competition, grades, containers, storage, transportation, sale methods, and price relationships. *Three hours a week. Three credit hours.* Mr. Libby

79. Cooperation in Agriculture.—Principles involved in coöperative organizations including the more important factors affecting the efficiency and success of coöperative organization, such as volume of business, capital and finance, management, and price policies. The history, organization, and management of coöperative associations marketing the more important agricultural products. *Three hours a week. Three credit hours.* Mr. Niederfrank

83-84. Thesis.—A thesis may be written on any problem in agricultural economics, farm management, marketing, agricultural finance, agricultural statistics, or agricultural prices. Prerequisite, permission to register. *Credit, arranged.* Members of the Departmental Staff

85. Marketing Dairy Products.—A specialized course considering the marketing of dairy products, with special emphasis on milk and cream in New England. Factors to be studied include production areas; utilization of milk; grades; transportation; storage; market channels; sales methods; prices; government regulation; foreign trade; demand; and city distribution. *Three hours a week. Three credit hours.* Mr. Dow

86. Agricultural Marketing (Apples and Small Fruits).—A specialized course in the economic factors involved in marketing apples and small fruits with special emphasis on New England. The topics considered are production, varieties, regional competition, grades, containers, storage, transportation, finance, sales methods, and the costs of marketing. *Two hours a week. Two credit hours.* Mr. Niederfrank

87. Agricultural Prices.—The underlying factors causing price changes in agricultural commodities, effects of inflation and deflation, interrelationship of supply and prices, long-time trends, seasonal variation, cyclical movements, agricultural price-raising measures. *Three hours a week. Three credit hours.* Mr. Jones

89. Marketing Poultry Products.—A specialized course in the economic factors involved in the marketing of eggs and poultry. Special consideration will be given to areas of production; grades; containers; transportation; storage; market channels; sales methods; foreign trade; demand; price; Federal participation; and costs of marketing. *Two hours a week. Two credit hours.* Mr. Dow

91. Land Utilization.—Utilization of the land area for various purposes, such as for agriculture, forestry, recreation, and industry, giving

primary attention to agriculture. Physical factors and economic conditions determining utilization of farm land, production areas for important farm commodities, shifts taking place in these areas, trends in population and consumption, land classification, land values, and land policy. Land utilization programs. *Three hours a week. Three credit hours.* MR. JONES

92. RURAL TAX PROBLEMS.—National, state, and local problems connected with rural taxation. The effect of increased tax burdens on farmers. Growth of public expenditures; sources of public revenues; the general property tax and its administration. How income, inheritance, and gasoline taxes affect farmers. Tax reform proposals. Problems involved in an equitable distribution of the tax burden. *Two hours a week. Two credit hours.*
MR. JONES

94. RURAL SOCIOLOGY.—A general course in the study of rural life. Subjects to be considered are: standard of living and welfare of rural people; rural population; farm tenancy; the town and village; rural organizations and rural leadership; and the probable sociological effect of the adjustment of agricultural production, soil conservation, resettlement and other governmental measures on rural life. *Three hours a week. Three credit hours.* MR. NIEDERFRANK

101. PRODUCTION COSTS.—Cost of producing important farm commodities in Maine and in competing areas; relation of cost of production to price; and efficiency of production under varying economic conditions. Prerequisite, Course 52. *Two hours a week. Two credit hours.* Additional credit may be arranged for special problems done in connection with this course.
MR. JONES

102. ADVANCED AGRICULTURAL STATISTICS.—A continuation of Course 75 giving special attention to the methods and practical application of correlation analysis involving two or more variables, multiple correlation, and linear and curvilinear relationships. Prerequisite, Course 75, and permission to register. *Credit, arranged.* MR. DOW

103. ADVANCED FARM MANAGEMENT.—A continuation of Course 74 with special emphasis on the organization and management of specified types of farms under certain economic conditions, farm prices, and labor efficiency. The student is given an opportunity for study along some line in which he has a special interest. Prerequisite, Course 74. *Credit, arranged.* MR. JONES

104. ADVANCED AGRICULTURAL MARKETING.—Advanced work in the marketing of a specific agricultural commodity. Special emphasis is given to marketing potatoes, apples, poultry, eggs, milk, butter, and cheese. Problem method is followed. Prerequisite, permission to register. *Credit, arranged.* MR. MERCHANT

AGRICULTURAL EDUCATION

PROFESSOR HILL; ASSISTANT PROFESSOR ELLIOTT

1. 2. PRACTICE TEACHING.—Both majors and minors in agricultural education are expected to do directed teaching in an approved school, either during or at close of the spring semester of the junior year; or immediately preceding or during the fall semester of the senior year; or during the spring semester of the senior year. *Time and credit arranged. Total credit, four hours.* MR. HILL

3. 6. SPECIAL METHODS IN TEACHING AGRICULTURE.—State and Federal legislation; the curriculum; teaching methods and lesson plans; building the course of study; making teaching plans for the year; rooms and equipment; part-time and evening school work; Future Farmers of America; long-time and annual programs of work; reviews, examinations, grades; classroom management. *Two hours a week. Two credit hours.* MR. HILL

5. SUPERVISED FARM PRACTICE.—Requirements for supervised farm practice; its importance; selection of projects; project plans; project records; project supervision; long-time supervised farm practice programs; project budgeting; giving credit for supervised farm practice; project contests. *Two hours a week. Two credit hours.* MR. HILL

8. METHODS OF TEACHING FARM SHOP.—A course in methods for teachers of vocational agriculture stressing importance of meaning, aims, and purposes; choosing type of shop; tools and equipment; determining how to organize shop; shop texts and references; content of courses; organizing the course content. *Two hours a week. Two credit hours.* MR. HILL

AGRONOMY AND AGRICULTURAL ENGINEERING

PROFESSOR CHUCKA; ASSISTANT PROFESSOR SWIFT; ASSISTANT PROFESSOR RALEIGH; ASSISTANT PROFESSOR LIBBY; ASSISTANT PROFESSOR MEYER

Soils and Fertilizers

1. SOILS.—Origin, types, physical and chemical properties of soils and their relation to crop production. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. LIBBY

3. SOILS (FOREST).—Origin, types, physical and chemical properties of soils as related to forests. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. SWIFT

5. Soil Formation, Erosion, and Conservation.—Soil-forming rocks and minerals, agencies involved in soil formation; causes, types, and extent of soil erosion; principles and methods of soil conservation. Classroom, *three hours a week. Three credit hours.* Mr. Chucka

6. Soils and Fertilizers.—Physical and chemical composition of soils and fertilizers as related to time and method of application, residual effects of fertilizers, fertilizer injury and fertilizer placement. Classroom, *two hours a week. Two credit hours.* Mr. Chucka

51. Soil Fertility.—Principles involved in the improvement and maintenance of soil fertility through the use of lime, stable manures, green manures, and commercial fertilizers. Classroom, *two hours a week. Two credit hours.* Mr. Chucka

52. Soil Classification, Surveying, and Mapping.—Theories, methods, and uses of soil classification, surveying, and mapping. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Swift

54. Soil Analysis.—Principles, methods, and practical value of the various field and laboratory methods of soil analysis. Prerequisites, Courses 1 and 6. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* Mr. Chucka

Crops

11. Field Crops.—A course dealing with the principal field crops of the United States with special reference to crops important in New England. Consideration is given to general culture, use, and their adaptation. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Raleigh

13. Weed Identification and Control.—Characteristics of weeds, their sources, method of reproduction, dissemination, migration, and methods of control. Prerequisites, Course 11 and Botany 2. Laboratory, †*four hours a week. Two credit hours.* Mr. Raleigh

14. Sweet Corn, Beans, and Peas.—The production of sweet corn, beans, and peas for canning purposes. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Raleigh

15. Potato Production.—A general study of all factors involved in the production of potatoes. Varieties, seed selection, preparation of land, planting, fertilization, spraying, harvesting, and storing. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Libby

16. Forage and Pasture Crops.—Grasses, legumes, and root crops, their management and uses for forage and pasture. Prerequisite, Course 11. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Raleigh

60. Crop Improvement.—Principles and methods involved in field-crop improvement and methods of testing new varieties. Prerequisite, Botany 45. *Three hours a week. Three credit hours.* Mr. Raleigh

62. Seed Potato Production.—A specialized study of the factors involved in seed potato production emphasizing selection of foundation seed stock, tuber unit planting, potato diseases, roguing, certification and development, and testing of new varieties. Prerequisite, Course 15. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Libby

*78. Marketing Potatoes.—A specialized course in the marketing of potatoes, emphasizing trends in production, regional competition, grades, containers, storage, transportation, sale methods, and price relationships. *Three hours a week. Three credit hours.* Mr. Libby

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*The description of this course also appears under the Department of Agricultural Economics and Farm Management and should be registered for under the designation, Fm 78.

Agricultural Engineering

30. Farm Machinery.—Construction, operation, care, and adjustment of farm machinery. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Meyer

33. Farm Structures.—Planning, designing, and the construction of farm buildings; water systems; heating systems; sewage disposal; and the use of concrete on the farm. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Swift

34. Farm Shop.—Training in the care and use of tools and equipment for ordinary construction and repair work found necessary on the farm. †*Four hours a week. Two credit hours.* Mr. Swift

35. Drainage and Land Reclamation.—A course covering theory and field work in taping, leveling, plane table, compass, and transit work. The theory and design of terraces, open ditches, soil-saving structures, and tile drainage systems with field work in their layout. Classroom, *two hours a week;* laboratory, **Three hours a week. Three credit hours.* Mr. Meyer

36. Farm Power. Application of power to farm operations. The construction, operation, care, and adjustment of gas and electric motors and related equipment. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Meyer

41. School Shop.—Instruction in wood-tool fitting and operations; furniture repair and refinishing; and painting. Laboratory, †*two hours a week. One credit hour.* Mr. Meyer

42. School Shop.—Instruction in forge and cold metal work, and soldering. Laboratory, †*two hours a week. One credit hour.* Mr. Swift

43. School Shop.—Instruction in drawing, blue print reading, concrete work, plumbing, and surveying. Laboratory, †*two hours a week. One credit hour.* Mr. Swift

44. School Shop.—Instruction in electricity, farm machinery repair, power transmission, and harness repair. Laboratory, †*two hours a week. One credit hour.* Mr. Meyer

Agronomy and Agricultural Engineering (General)

81. 82. Seminar.—Study of recent literature, problems and experiments pertaining to soils, crops, and agricultural engineering. For juniors and seniors majoring in Agronomy. *One hour a week. One credit hour.*
Members of the Departmental Staff

83. 84. Special Problems in Agronomy and Agricultural Engineering.—*Credit, arranged.* Members of the Departmental Staff

85-86. Thesis.—*Credit, arranged.*
Members of the Departmental Staff

ANIMAL INDUSTRY

Professor Corbett; Professor Dorsey; Professor Smyth; Assistant Professor Gardner; Assistant Professor Hall; Assistant Professor Witter; Mr. Dike; Mr. Pope

Animal Husbandry

2. General Animal Husbandry.—The live stock industry, local and regional, including a study of breed histories and developments, and market types and classes. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Corbett, Mr. Hall

3. Care, Feed, and Management of Live Stock.—Selection, breeding, growing, and maintenance of horses, cattle, sheep, and swine. Consideration is given to general principles of nutrition as applied to live stock, composition of feed stuffs, comparison and use of feeding standards, and calculating rations. Prerequisite, Course 2. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.* Mr. Corbett, Mr. Hall

42. Advanced Live Stock Judging and Management.—A laboratory course in which the individual student gets experience in handling live stock and preparation of stock for show ring and market. In so far as it is practicable, visits will be made to live stock farms. †*Two hours a week. One credit hour.* Mr. Hall

44. Advanced Live Stock Feeding and Management.—Nutrition and feeding experiments, as well as the methods and practices of the most successful feeders in production of milk, meat, and rearing of horses. Prerequisite, Course 3. *Three hours a week. Three credit hours.* Mr. Corbett

55. Animal Nutrition.—The physiology of digestion; the metabolism of carbohydrate, fat, protein, and mineral nutrients; net energy and methods used in determining energy values. Application of nutritional theories to practical feeding problems. Prerequisite, Course 44. *Two hours a week. Two credit hours.* Mr. Corbett

57. 58. Problems in Animal Husbandry.—*Credit, arranged.* Mr. Corbett

60. Advanced Animal Breeding.—Principles and theories of breeding as applied to the live stock industry; study of pedigrees and records using the breed herd books; and economic study of the generative systems of domestic animals. Prerequisite, Course 3. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Hall

63. 64. Seminar.—Preparation and presentation of papers dealing with topics in the field of Animal Husbandry. *One hour a week. One credit hour.* Mr. Hall

65. Advanced Animal Industry.—Market classes and types; pasture and feed lot management; and farm and packing house methods of preparing animal products for the market. Prerequisite, Course 3. *Two hours a week. Two credit hours.* Mr. Hall

Animal Pathology

5. Anatomy of Domestic Animals.—A general course in comparative anatomy of the domestic animals and birds. Emphasis is placed on the important histological features, and those parts of the body involved in the

common diseases. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. WITTER

6. PHYSIOLOGY OF DOMESTIC ANIMALS.—Principles of physiology as applied to domestic animals including birds. Special emphasis is placed on comparative features, especially of the circulatory, respiratory, digestive, and uro-genital systems. *Three hours a week. Three credit hours.* MR. WITTER

7. ANIMAL HYGIENE.—Principles of hygiene and sanitation applied to prevention and control of common diseases of domestic animals. Special attention given to the fundamentals of disease processes. Prerequisite, Course 6. *Two hours a week. Two credit hours.* MR. WITTER

8. ANIMAL PATHOLOGY.—A study of infectious and parasitic diseases of domestic animals including the principles of immunology as applied to biological treatment and prevention. Prerequisite, Course 7. *Two hours a week. Two credit hours.* MR. WITTER

9. DISEASE AND PARASITE CONTROL (IN WILD LIFE).—A study of known infectious and parasitic diseases of game and fur-bearing animals, emphasizing preventive and control measures. First half-semester. Classroom, *three hours a week;* laboratory, **three hours a week. Two credit hours.* MR. WITTER

Ph 8. POULTRY DISEASES.—Principles of hygiene and sanitation applied to the prevention and control of the diseases of poultry, including a detailed consideration of the pathological processes involved in the common diseases. *Two hours a week. Two credit hours.* MR. WITTER

Dairy Husbandry and Dairy Technology

1. GENERAL DAIRYING.—Milk, its secretion, composition, properties, pasteurization, and separation. Dairy practices in producing and handling milk and cream. Dairy equipment; use of common dairy machinery. Testing dairy products for fat (Babcock method), acidity, total solids, and common adulterations. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. DORSEY

2. BUTTER MAKING.—Creamery butter industry. Starter making, cream ripening, churning, and preparing butter for market. Prerequisite, Course 1. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. POPE

3. CHEESE MAKING.—Manufacture and curing of various types of cheese, including cheddar and soft cheeses adapted to the New England trade. The laboratory work requires six consecutive hours. Prerequisite, Course 1.

Classroom, *two hours a week;* laboratory, **six hours a week. Four credit hours.* Mr. Dorsey

4. Condensed Milk.—Manufacture of unsweetened and sweetened condensed milk, and milk powder. Sanitary control of milk supply, factory methods, defects in products, and economic phases of the industry. Prerequisite, Course 1. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Dorsey

5. Market Milk.—The market-milk industry from standpoints of production, supply, sanitary control, transportation, processing, delivery, organization, and economic aspects. Prerequisite, Course 1. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.* Mr. Pope

6. Judging Milk and Milk Products.—Study and practice of methods employed in scoring and judging milk and milk products. Prerequisite, Course 1. †*Two hours a week. One credit hour.* Mr. Pope

51. Dairy Technology.—Milk products and by-products, methods of manufacture and processing, and scrutiny of recent literature relating to advances in dairy technology. Lectures and assigned readings. Prerequisite, Course 1. *Two hours a week. Two credit hours.* Mr. Dorsey

53. 54. Problems in Dairy Husbandry.—*Credit, arranged.* Mr. Dorsey

55. Dairy Refrigeration.—Principles of refrigeration, refrigeration machinery and equipment, and applications of refrigeration to milk and milk products. *Two hours a week. Two credit hours.* Mr. Dorsey

58. Ice Cream Making.—Manufacture of ice cream and ices. Prerequisites, Courses 51 and 55. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Dorsey

61. 62. Dairy Technology Seminar.—Study of recent and current literature dealing with research problems and the industrial applications of research findings in the technological field of the dairy industry. For seniors majoring in Technology. *One hour a week. One credit hour.* Mr. Dorsey

63. Advanced Dairy Products Testing.—Testing milk and milk products by the Mojonnier method. Open to senior students in the Department of Animal Industry. †*Two or four hours a week. One or two credit hours.* Mr. Pope

64. Advanced Dairy Products Control.—Approved methods of testing dairy products, chemical, physical, and bacteriological used for control purposes in the dairy industry and the practical application of such new tests as they are introduced. Prerequisite, Course 63. †*Four hours a week. Two credit hours.* Mr. Dorsey

66. Dairy Machinery.—Milk and milk-products machinery, accessory machinery, and plant layout. Prerequisite, Course 51. †*Four hours a week. Two credit hours.* Mr. Dorsey

Poultry Husbandry

1. General Poultry Husbandry.—A general course in poultry production, incubation, brooding, housing, feeding, and management. Laboratory work includes production judging, preparation of poultry products for market, egg grading, and other poultry management practices. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Smyth

2. Poultry Breeding.—Principles of breeding as applied to poultry inheritance of egg productivity; systems of breeding; and study of pedigrees and breeding results. Some time is given to a study of methods used by successful poultry breeders. Prerequisites, Course 1 and Botany 45. Classroom, *two hours a week. Two credit hours.* Mr. Smyth

3. Exhibition and Production Poultry Judging.—Selection and mating of fancy and utility poultry. Laboratory practice in judging fancy and utility poultry, and a study of the standard requirements of the breeds. Prerequisite, Course 1. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Gardner

4. Incubation and Brooding.—Principles of incubation and brooding. Laboratory practice in incubator and brooder management. Prerequisite, Course 1. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Smyth

5. Poultry Feeding.—General principles of nutrition as applied to poultry; poultry feeds; calculating rations; estimating cost of feeds and feeding; and methods of feeding for economical production. Prerequisite, Course 1. *Two hours a week. Two credit hours.* Mr. Gardner

6. Poultry Farm Management.—The business of poultry farming; systems and operations in use on large poultry farms; planning of specialized poultry farms. In so far as is practicable, visits will be made to poultry farms. Prerequisites, Courses 1, 2, 3, and 5. Classroom, *one hour a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Gardner

10. Incubation and Brooding of Game Birds.—Principles of incubation and brooding; study of equipment and practical methods of brooder and range management. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* Mr. Smyth, Mr. Gardner

51. 52. Problems in Poultry Husbandry.—*Credit, arranged.*
Mr. Smyth

53. 54. Poultry Seminar.—A study of poultry organizations and literature giving results of recent research work in the field of poultry husbandry. Prerequisites,Courses 1, 2, and 3. Classroom, *one hour a week. One credit hour.* Mr. Smyth

BACTERIOLOGY AND BIOCHEMISTRY

Professor Hitchner; Professor Smith; Assistant Professor Highlands; Assistant Professor Pedlow; Mr. Mundt; Mr. Fry

Bacteriology

1. Bacteriology.—A laboratory course in general bacteriology. Open to all students. The work includes the preparation of the usual culture media and study of morphological and biological characteristics of typical bacteria. Some outside reading is required. Course 3 must be taken in conjunction. †*Six hours a week. Three credit hours.*
Mr. Hitchner, Mr. Highlands, Mr. Dick

2. Bacteriology.—Similar to Course 1. Offered for students in the College of Technology and others who may elect it. Special emphasis is placed upon bacteriology of water and sewage. Prerequisite, Course 3. †*Six hours a week. Three credit hours.* Mr. Highlands, Mr. Dick

3. Bacteriology.—A lecture course open to all students. It must be elected by students taking Course 1. Subjects considered include: the history of bacteriology; classification and biological characteristics of bacteria; bacteria in air, water, soil, and dairy products; relation of bacteria to health and disease; and immunity. *Two hours a week. Two credit hours.*
Mr. Hitchner

5. Bacteriology.—An abbreviated laboratory course in general bacteriology. Practical demonstrations of the relation of bacteria to disease, sanitation, food handling, and other economic phases are given. The aim is to develop appreciation of bacteriological technic. Course 3 must be taken in conjunction. †*Two hours a week. One credit hour.* Mr. Highlands

10. Sanitation and Public Health.—General consideration of the relationship between the health of the individual and environment. Special emphasis placed on communicable diseases and their control. Sanitary pro-

grams for the home and community will be considered, such as sewage disposal, safe water supplies, industrial sanitation, and dust menaces. Prerequisite, Course 3. *Two credit hours.* MR. HIGHLANDS

52. BACTERIOLOGY.—Physiological, morphological, biochemical, and serological activities of bacteria; isolation and identification of pathogens together with animal inoculation and serological tests. Prerequisites, Courses 1 or 2, and 3. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. HITCHNER

54. BACTERIOLOGY (DAIRY).—Effect of pasteurization on milk bacteria; quantitative bacterial determination of butter and cheese; study of typical milk bacteria; use of special biochemic tests for quality of milk; and study of effect of separators, clarifiers, coolers, etc., on the bacterial content of milk and cream. Prerequisites, Courses 1 or 2, and 3. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. HITCHNER

55. BACTERIOLOGY (SOIL).—A theoretical and experimental consideration of the relationship of microörganisms and soil fertility. A study of the factors which influence the changes produced through microbial action. Prerequisites, Courses 1 or 2, and 3. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. HITCHNER

56. FOOD TECHNOLOGY.—A general course in the principles and the applications of food conservation, with especial reference to commercial practices in canning, drying, freezing, and special problems. Open to seniors and other students whose training in bacteriology and chemistry meets the approval of the instructor. Classroom, *one hour a week;* laboratory, †*four hours a week. Three credit hours.* MR. HIGHLANDS

61. 62. SEMINAR.—Preparation and presentation of papers dealing with current researches and developments in the fields of bacteriology. *One hour a week. One credit hour.* MR. HITCHNER

101. 102. PROBLEMS IN BACTERIOLOGY.—A laboratory and conference course for students desiring to pursue some particular line of bacteriological investigation. This may include problems in applied bacteriology especially devoted to food technology. Open only to students who have done considerable work in bacteriology. The kind of work is arranged to suit individual students. *Credit, arranged.* MR. HITCHNER, MR. HIGHLANDS

Biochemistry

1. ORGANIC CHEMISTRY.—For agricultural students. A study of the aliphatic compounds; hydrocarbons, alcohols, acids, amines, amides, etc., and

brief resumé of the more important aromatic compounds. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*

Mr. Smith

2. Biochemistry.—Plant biochemistry, including a study of the physico-chemical reactions of plants. A detailed study of carbohydrates, fats, and proteins; glucosides; and enzymes. Prerequisite, Course 1. Classroom, *three hours a week;* laboratory, †*four hours a week. Five credit hours.*

Mr. Smith

4. Organic Chemistry.—Ionization and the intensity factor of acidity; elementary surface chemistry and colloidal phenomena; the hydrocarbons and alcohols. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.* Mr. Pedlow

5. Biochemistry.—The aldehydes, acids, fats, carbohydrates, proteins and related compounds. Prerequisite, Course 4. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.*

Mr. Pedlow

8. Agricultural Chemistry.—A brief discussion of the chemistry of plants, animals, soil, fertilizers, insecticides, milk, and related topics. This course is designed to furnish students with a working knowledge of chemistry as applied to agricultural products. *Two hours a week. Two credit hours.* Mr. Smith

9. Biochemistry.—Animal biochemistry. Composition of the animal body; chemistry of digestion; assimilation and metabolism of foods; chemistry of blood and lymph; and elimination of waste product. Prerequisite, Course 2. *Two hours a week. Two credit hours.* Mr. Smith

41. Biochemistry.—Detailed study of carbohydrates, fats, and proteins; nature of enzymes and their effect upon food materials; chemical changes involved in digestion, assimilation, and absorption of foods; respiration; chemistry of the blood, including clinical methods of analysis; and elimination of waste material from the animal body. Prerequisite, Course 1 or 4. *Three hours a week. Three credit hours.* Mr. Smith

53. Agricultural Analysis.—A course dealing with quantitative analysis of fertilizers, foods, dairy products, and textile materials. Type of work will be adapted to needs of the student. Prerequisite, Course 1 or 4. †*Four or*†*six hours a week. Two or three credit hours.* Mr. Smith

57. Biological Colloids.—An introduction to colloidal chemistry with application and significance in biological systems. Open to junior, senior, and graduate students. Prerequisites, Courses 1 and 2 or 4 and 5. *Three hours a week. Three credit hours.* Mr. Pedlow

60. Physiological Chemistry.—The physiological utilization of the carbohydrates, fats, and proteins with special emphasis upon the functions of enzymes, hormones, and vitamins. Prerequisite, Course 2 or 5. *Three hours a week. Three credit hours.* Mr. Pedlow

61. Advanced Biochemistry.—A detailed treatment of the proteins, carbohydrates, and lipids. Prerequisite, Course 60. *Three hours a week. Three credit hours.* Mr. Pedlow

64. Biochemical Laboratory Methods.—Methods used in the biochemical laboratory for testing carbohydrates, fats, amino acids, proteins, enzymes; studies of the colloidal properties of biochemical material; H-Ion concentration measurement methods; and individual problems dealing with various phases of biochemical investigations. Prerequisite, Course 53. †*Six hours a week. Three credit hours.* Mr. Pedlow

101. 102. Biochemical Research.—Problems dealing with various phases of biological or agricultural chemistry. Special problems may be selected by the student under direction and advice of the Department. A comprehensive written summary is required. Open only to senior and graduate students. *Credit, arranged.* Mr. Smith, Mr. Pedlow

BOTANY AND ENTOMOLOGY

Professor Steinmetz; Associate Professor Dirks; Associate Professor Steinbauer; Assistant Professor Hyland; Mr. Ogden; Mr. Gorham

Botany

1 (2). General Botany.—Fundamental principles of plant life, with special emphasis on life processes. Required of all students in the College of Agriculture excepting those registered in Home Economics. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.*

Mr. Steinmetz, Mr. Steinbauer, Mr. Hyland, Mr. Ogden, Mr. Gorham

30. Plant Ecology.—Environmental factors determining adaptations and distribution of plant life. Prerequisite, Course 1 (2). Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.*

Mr. Steinbauer

32. Plant Physiology.—For students in Forestry. Prerequisites, Course 1 (2) and one year of chemistry. Classroom, *two hours a week*s laboratory, †*four hours a week. Four credit hours.* Mr. Steinbauer

33. Forest Botany (Dendrology).—Classroom and field work on characteristics, habits, and classification of trees and native shrubs of North America. Prerequisite, Course 1 (2). Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Hyland, Mr. Ogden

34. Forest Botany (Physiography).—A comprehensive study of range, distribution, and soil requirements of commercial timber trees of the United States. Prerequisite, Course 33. Classroom, *one hour a week;* laboratory, †*three hours a week. Two credit hours.* Mr. Hyland

35. Plant Anatomy.—Structure of leaves, roots, and stems of herbaceous and woody plants. Prerequisite, Course 1 (2). Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.*
Mr. Hyland, Mr. Steinmetz

36. Taxonomy.—Flora of the field, woods, and stream. Prerequisite, Course 33. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Ogden

41. Biotic Relationships.—Interrelationships of plants and animals with emphasis upon fungi and lichens, and mosses. Prerequisite, Course 36. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Ogden

42. Forest Pathology.—Principles of plant diseases, as applied to seedlings, nursery stock, and forest trees; destruction of timber by fungi; and principles of control. Required of seniors in Forestry. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* Mr. Steinmetz

43. Wood Identification.—Identification of commercial woods with the unaided eye, lens, and microscope. Open to students in Chemical Engineering. **Three hours a week. One credit hour.* Mr. Hyland

45. General Genetics.—Principles of genetics. Prerequisite, one year of biology. Open to juniors and seniors. *Three hours a week. Three credit hours.* Mr. Steinmetz, Mr. Ogden

46. Genetics Laboratory.—Breeding of Drosophila. Study of plant materials. Supplementary reading. †*Four hours a week. Two credit hours.*
Mr. Steinmetz, Mr. Ogden

50. Histological Technique.—Methods and technique in the preparation of microscopic sections of plant material. Admission by arrangement with the instructor. Classroom, *one hour a week;* laboratory, **six hours a week. Three credit hours.* Mr. Hyland

53. Plant Physiology.—Classroom and laboratory work on the physiology of plants. Prerequisites, Course 1 (2) and one year of chemistry.

Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* MR. STEINBAUER

56. PLANT PATHOLOGY.—Principles of plant disease. Open to juniors and seniors. Prerequisite, Course 1 (2). Classroom, *two hours a week;* laboratory †*four hours a week. Four credit hours.* MR. STEINMETZ

57. TAXONOMY OF VASCULAR PLANTS.—Characteristics, identification, and classification of representative species of vascular plants. Prerequisite, Course 1 (2). Given in 1939. Classroom, *two hours a week;* laboratory and field, †*four hours a week. Four credit hours.* MR. STEINMETZ

59. GENERAL MYCOLOGY.—Morphology, identification, and classification of representative species of fungi. Prerequisite, Course 1 (2). Classroom, *two hours a week;* laboratory and field, †*four hours a week. Four credit hours.* MR. STEINMETZ

Entomology

21. GENERAL ENTOMOLOGY.—Fundamental facts and principles of insect life, principles of control, characteristics of the orders and families, and the relations of insects to plants and animals. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* MR. DIRKS

22. FOREST ENTOMOLOGY.—Principles of insect life with special reference to shade and forest trees. Structure, metamorphosis, classification, and methods of control. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* MR. DIRKS

23. TAXONOMY OF INSECTS.—A general course on insects with emphasis upon identification and classification. Methods of collecting, rearing, and mounting insects. Prerequisite, one year of biology. Consent of instructor required. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* MR. DIRKS

26. ENTOMOLOGY.—Designed for students in Wildlife Conservation. Classification, identification, and life histories. Emphasis upon aquatic life. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. DIRKS

40. APICULTURE.—A practical course in the care of bees. The honeybee, its activities and habits; races of bees; diseases and enemies; and the production and marketing of honey. Given in 1939. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* MR. DIRKS

46. ADVANCED FOREST ENTOMOLOGY.—An intensive study of insects that are destructive to shade and forest trees and to forest products. Prereq-

uisite, Course 21 or 22. Given in 1940. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* MR. DIRKS

49. ECONOMIC ENTOMOLOGY.—An intensive study of the important insects of the orchard, garden, and farm; their life histories and habits, injuries, and methods of control. Prerequisite, Course 21 or 22. Consent of instructor required. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. DIRKS

Problem Courses

47. 48. PROBLEMS IN BOTANY OR ENTOMOLOGY.—Open to juniors and seniors who have special interest and qualification in botany or entomology. The approval of the head of the department must be obtained before registering for this work. *Credit, arranged.*

MEMBERS OF THE DEPARTMENTAL STAFF

105. 106. PROBLEMS IN ENTOMOLOGY.—*Credit, arranged.* MR. DIRKS

107. 108. PROBLEMS IN BOTANY.—*Credit, arranged.* MR. STEINMETZ

FORESTRY

PROFESSOR DEMERITT; ASSOCIATE PROFESSOR ALDOUS; ASSOCIATE PROFESSOR ASHMAN; ASSISTANT PROFESSOR CHAPMAN: *MR. BAKER; MR. MENDALL; MR. HESS; MR. QUINN

1. ELEMENTS OF FORESTRY.—Importance and scope of the field of forestry, general methods of cutting and reforestation applicable in different regions in the United States. Designed as a beginning course for foresters and a cultural course for others. Required of freshmen majoring in Forestry, and open to other students. *Two hours a week. Two credit hours.*

MR. DEMERITT

2. ELEMENTS OF FORESTRY.—A continuation of Course 1, required of freshmen majoring in Forestry and open to other students. Prerequisite, Course 1. *Two hours a week. Two credit hours.* MR. DEMERITT

3. LOGGING.—The lumber industry in the United States considered from an economic standpoint; an account of logging methods in different forest regions. Textbook and lectures. Forestry sophomores only. *Two hours a week. Two credit hours.* MR. CHAPMAN

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*On leave of absence, 1938-1939.

4. Administration and Protection.—Problems in the administration of national, state, and private forest enterprises. Forest improvements, including trails, telephone lines, and look-out towers. Forest fire control. *Four hours a week. Four credit hours.* Mr. Demeritt

5. Forest Mensuration.—Theory and application of measurements of logs, trees, and stands of timber. Classroom, *two hours a week.* Field work, **three hours a week. Three credit hours.* Mr. Demeritt, Mr. Chapman

6. Forest Mensuration.—A continuation of Course 5. Theory and application of measurements of growth and yield. Classroom, *two hours a week;* field work, **three hours a week. Three credit hours.*
Mr. Demeritt, Mr. Chapman

7. Lumber Manufacture.—Milling and marketing problems of the lumber industry in America. Forestry seniors only. First half-semester. *Four hours a week. Two credit hours.* Mr. Chapman

8. Silvics.—The life factors determining the character and form of forest vegetation. The development of forest types and the silvical characteristics of stands. Prerequisites, Botany 33, 34. Forestry juniors only. *Two hours a week. Two credit hours.* Mr. Ashman

9. Wood Preservation.—Durability and seasoning of native woods; preservatives in commercial use; and methods of operation and equipment of preserving plants. Special attention given to posts, ties, poles, paving-blocks, and structural timbers. Prerequisites, Botany 33, 34, and 35. First half of semester. *Two hours a week. One credit hour.* Mr. Hess

10. Nursery Practice.—To be taken in connection with Course 12. The study of forest-tree seed and seedlings; seeding and transplanting in the State Forest Nursery; practice in field planting. Nursery management. A minimum of 48 hours of work in the nursery required. Last nine weeks. **Six hours a week. One credit hour.* Mr. Ashman

11. Forest Recreation.—Recreation from the viewpoint of the forester. Recreation planning in state and national forests and parks and on private estates. Brief consideration of game management in forestry. Summer camp administration. Forestry juniors and seniors only. *One hour a week. One credit hour.* Mr. Ashman

12. Seeding and Planting.—Artificial regeneration and afforestation, in the practice of forestry. Forest nursery management. *Two hours a week. Two credit hours.* Mr. Ashman

13. Forest Protection.—Forest enemies with particular reference to fire, insects, and fungi. General methods for the control of forest fires and

the administration of fire-fighting organizations. *Two hours a Two credit hours.* MR.MAN

14. FOREST PRODUCTS.—Forest products other than logs aber, such as pulpwood, veneers, shingles, lath, tight and slack cooperops and headings, excelsior, vehicle woods, spool stock, turpentine, tarams, syrups, dye-woods, and charcoal. Methods of utilization, markets, lues. *Two hours a week. Two credit hours.* MR. MAN

16. WOOD TECHNOLOGY.—Identification and classification ofommercial woods of the United States based on simple lens inspection echnical qualities of various species and their uses in the arts and traPrerequisite, Botany 33, 34, and 35. Classroom, *one hour a week;* laborat*two hours a week. Two credit hours.* IESS

18. PREPARATION AND DRAFTING OF MAPS.—Instruction in threct drafting, preparation, and coloring of maps. The use of accepted coonal signs and symbols in mapping, and preparation of maps for reports ummaries of field surveys. Prerequisite, Drafting 1, 2a. **Three hour eek. One credit hour.* MR. C MAN

20. WOODLOT FORESTRY.—General principles of forestry, witecial reference and application to farm woodlands, particularly in thi.gion. Lectures and textbook work in elementary systems of cutting, es ting, protection, and reforestation. Especially for agricultural students. n to all students. *Two hours a week. Two credit hours.* MR. C MAN

22. MAPPING.—Field and office work in the preparation of for roperty maps with special reference to type mapping for forest covegame escape cover, and food cover. Classroom, *one hour a week.* Field wc **six hours a week. Three credit hours.* MR AKER

24. GAME FOOD AND COVER PLANTING.—Artificial regenerati and transplanting of trees and shrubs with particular reference to thos aving a value as game food and cover. Classroom, *one hour a week.* Fi work, **three hours a week. Two credit hours.* M. BAKER

43. 44. SPECIAL PROBLEMS.—Original investigation in advanl forestry work, the subject to be chosen after consultation with the dep tmental staff. Open to high-ranking juniors and seniors. *Credit, arranged.*

MEMBERS OF THE DEPARTMENT STAFF

47-48. ORIENTATION.—A course of lectures for freshmen in orestry designed to acquaint them with the fields open to forestry and wildli graduates. *One hour a week. No credit.* MR. DEMERITT

51. REGIONAL SILVICULTURE.—Silvicultural methods; applied systems of silviculture and management considered in relation to commercially mpor-

tant timber species and forest types in the United States. First half-semester. *Four hours a week. Two credit hours.* MR. ASHMAN

52. POLICY AND ECONOMICS.—Character, extent, and distribution of forest resources, national, state, private, and foreign. Relation of government, corporations, and individuals to forest resources and applied forest management. Brief discussion of state and Federal forest laws. *Four hours a week. Four credit hours.* MR. HESS

53. FOREST FINANCE.—Forest valuation and statics. The appraisal of values of stands of timber. Determination of returns from forests under management. Damage appraisal. First half-semester. Classroom, *three hours a week.* Laboratory, †*two hours a week. Two credit hours.*

MR. HESS

55. FOREST MANAGEMENT.—Theory of the normal forest; forest organization and regulation for a sustained yield. Calculations for and preparation of a forest-management plan. First half-semester. *Four hours a week. Two credit hours.* MR. HESS

57. GAME MANAGEMENT.—Production of sustained annual crops of wild game for recreational use. Field studies in game-census work, artificial restocking, and ecological factors controlling game populations. First half-semester. Classroom, *four hours a week. Two credit hours.* MR. MENDALL

101. 102. FOREST MENSURATION PROBLEMS.—*Credit, arranged.*

MR. DEMERITT

103. 104. FOREST MANAGEMENT PROBLEMS.—*Credit, arranged.*

MR. DEMERITT, MR. HESS

105. 106. GAME MANAGEMENT PROBLEMS.—*Credit, arranged.*

MR. ALDOUS

107. 108. RESEARCH METHODS.—*Credit, arranged.* MR. ALDOUS

Courses in Camp

35s. SILVICULTURE.—Sophomore year only. Character and form of forest vegetation and recommended treatment of different forest types. Studies to be conducted on areas now operated by Government and private owners. *Sixteen hours a week. Two credit hours.*

MEMBERS OF THE DEPARTMENTAL STAFF

37s. FOREST MENSURATION.—Sophomore year only. Practical field work in the measurement of logs, individual trees and large stands of timber. Forestry instruments. **Eight hours a week. One credit hour.*

MEMBERS OF THE DEPARTMENTAL STAFF

39s. Forest Products.—Sophomore year only. Study of forest products other than logs and lumber with particular reference to their manufacture. **Eight hours a week. One credit hour.*

Members of the Departmental Staff

41. Practice of Forestry.—Forestry seniors only. Business principles involved in the management of a forest area including the preparation of a complete working plan. Topographic maps and detailed estimate of stands are included in the plan. Second half-semester. **Forty-eight hours a week. Nine credit hours.* Mr. Ashman, Mr. Hess

45s. General Ecology.—Course covering the field study of flora and fauna in relation to environment. Field work, **twenty-four hours a week. Three credit hours.* Members of the Departmental Staff

HOME ECONOMICS

Professor Greene; Professor Sweetman; Assistant Professor Musgrave; Assistant Professor Coney; Assistant Professor McCarthy; Assistant Professor Nesbitt; Mrs. Snyder; Miss Borgman; Miss Kelley; Miss Gould

1. Introduction to Home Economics.—A study of the problems of adjustment to college life and a survey of the professional fields open to Home Economics trained women. *Three hours a week. Three credit hours.*

Miss Greene, Miss Nesbitt, Miss Borgman

2. Clothing Selection Problems.—Study of factors involved in selection of clothing in good taste. Economic aspects including budgets and detailed study of fabrics and fibers. Classroom, *two hours a week;* laboratory, *†two hours a week. Three credit hours.* Miss Kelley

3. Design.—A first course in art expression. The principles of design as they may be applied to house decoration, costume design, advertising and related subjects. Some technique in the use of color, line, balance, rhythm, emphasis, and proportion is acquired in the laboratory. Classroom, *one hour a week;* laboratory, *†four hours a week. Three credit hours.* Miss Musgrave

4. The House.—Selecting and furnishing the house in accordance with family needs and resources. Problems based on existing housing conditions and a study of the effect of changing social, economic, and material factors. Prerequisite, Course 3. Classroom, *one hour a week;* laboratory, *†four hours a week. Three credit hours.* Miss Borgman

5; 6. Foods.—Selection and preparation of foods in relation to nutritive quality, palatability, digestibility, sanitary quality, and economy and study

of the food market from the consumer's standpoint. Laboratory work in the principles of buying and preparing foods and the planning and serving of family meals. Prerequisites, one year of chemistry; for Home Economics students, Chemistry 5 and Biochemistry 4. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* MRS. SWEETMAN, MRS. SNYDER

7; 8. CLOTHING CONSTRUCTION PROBLEMS.—A laboratory course dealing with the techniques of garment construction. The use of the sewing machine, commercial patterns, selection of materials, fitting, and finishes are included. Prerequisite, Course 3. Laboratory, †*four hours a week. Two credit hours.* MISS KELLEY

9. CLOTHING CONSTRUCTION PROBLEMS.—A laboratory course, covering in one semester material in Course 7, 8. For students who have had adequate previous training in this field. Admission by arrangement only. Laboratory, †*four hours a week. Two credit hours.* MISS KELLEY

10. HOME CARE OF THE SICK.—A study of the principles and practices of care of the sick. Designed to train the student to recognize common symptoms of departure from normal health, to give routine home care in minor illnesses, and to carry out intelligently the directions of a physician. Prerequisite, Bacteriology 3. *One credit hour.* MISS BORGMAN

11 (12). HOUSEHOLD MANAGEMENT.—Homemaking as a profession. Standards and objectives for household management in the provision of health, contentment, and development of family members. Techniques of management of time and energy to contribute to securing the values of family life. *Two hours a week. Two credit hours.* MISS BORGMAN

14. THE PRE-SCHOOL CHILD.—A study of factors involved in physical, mental, social, and emotional development of children. Opportunity for observing and guiding activities of pre-school children in a play school. For Home Economics students. Classroom and laboratory, *arranged. Three credit hours.* MISS NESBITT

17. APPLIED DESIGN.—Application of design principles to problems in textiles, including block printing, batik, decorative needlework, and hand weaving. Prerequisite, Course 3. Laboratory, †*four hours a week. Two credit hours.* MISS MUSGRAVE

18. APPLIED DESIGN.—A second-semester course similar to the above but with special emphasis on problems which may be used in home economics classes in secondary schools. Prerequisite, Course 3. Laboratory, †*four hours a week. Two credit hours.* MISS MUSGRAVE

21 (22). HOUSEHOLD ADMINISTRATION.—Students organize and execute activities of the home management house. Emphasis on attitudes essen-

tial to satisfactory group living and on managerial ability. Marketing, planning, preparing and serving meals, care of a young child, money management, care of the house, and informal home entertaining. Seniors or juniors by permission. *Three credit hours.* MISS BORGMAN

23 (24). FAMILY MEALS.—Food selection and preparation with emphasis on nutritional adequacy, moderate cost, and scientific methods of preparation. For Arts and Sciences students above freshman rank only. Classroom, *one hour a week;* laboratory, †*four hours a week.* (Given one semester only.) *Three credit hours.* MRS. SWEETMAN, MRS. SNYDER

25. ECONOMICS OF THE HOUSEHOLD.—Planning personal and family expenditures with emphasis on problems of the consumer-buyer. For Arts and Sciences students above freshman rank only. *Two hours a week. Two credit hours.* MISS GREENE

26. THE CHILD IN THE HOME.—Functions of the home as an environment for human development; factors involved in the growth and development of children. For Arts and Sciences students. Corresponds in part to Course 14. Laboratory consists of observation of play school. Classroom and laboratory, *arranged. Three credit hours.* MISS BORGMAN

28. CAMP FEEDING.—Problems involved in selection, purchase, and preparation of food for camp groups. Open to Forestry juniors by permission of the head of the Forestry Department, and to others by permission of the instructors in charge of the course. Classroom and laboratory, *three hours per week. Two credit hours.* MRS. SWETMAN, MRS. SNYDER

43 (44). HOUSE FURNISHING.—House furnishing as an art. Problems in choice and arrangement of furniture and materials to satisfy aesthetic and functional requirements. Prerequisite, Course 3, and Course 4 or special permission of the instructor. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MISS MUSGRAVE

51. ADVANCED CLOTHING.—Clothing economics including study of fashion, retailing, and standards for consumer buying of clothing. Laboratory problems in selecting and constructing tailored coats and children's clothing. Prerequisites, Courses 2 and 3. Classroom, *one hour a week;* laboratory, †*four or six hours a week. Three or four credit hours.*

MISS MUSGRAVE, MISS KELLEY

52a. ADVANCED CLOTHING AND COSTUME DESIGN.—A continuation of Course 51. Application of principles of line, color, dark and light, and texture to the designing of costumes for the individual. Draping on the dress form and constructing informal and formal silk dresses. Laboratory, †*six hours a week. Three credit hours.* MISS MUSGRAVE

52b. Advanced Clothing.—Application of design principles to the selection of costumes for the individual. Laboratory study of commercial patterns, fitting atypical figures, flat pattern designing and the making of formal and informal silk dresses. Laboratory, †*six hours a week. Three credit hours.* Miss Musgrave

53 (54). Family Economic Problems.—A study of family cash and real income as related to American standards of living. Household budgets. Consumer buyer problems. Prerequisite or parallel, Course 11. *Three hours a week. Three credit hours.* Miss Greene

55 (56). Home Economics Education.—The teaching of home economics in junior and senior high schools. A study of setting up objectives, selecting and organizing teaching units, and choosing effective methods, as illustrated in texts, courses of study, and current literature. *Three hours a week. Three credit hours.* Miss Greene

57. 58 (a-c). Unit Courses in Foods.

57a. Food Preservation.—The principles and recommended practices for household food preservation with emphasis on canning. Prerequisites, Bacteriology 3 and 5, and Course 6. *One credit hour.* Mrs. Sweetman

57b (58b). Demonstrations.—The planning and giving of demonstrations illustrating recommended practices for the home with emphasis on food preparation. Open to seniors and juniors by special permission. *One credit hour.* Miss McCarthy

57c (58c). Nursery School Meals.—The planning, preparing, and serving of meals for the nursery school. Prerequisite, Course 65. *One to two credit hours.* Miss Borgman

59, 60 (a-j). Special Problems.—Individual problems in the various fields of home economics, arranged to enable students to extend their command of subject matter, or develop techniques according to individual interests and needs. *One to six credit hours,* in each subdivision.

59, 60a. Nutrition
59, 60b. Foods
59, 60c. Clothing and Textiles
59, 60d. Design
59, 60e. History of Costume
59, 60f. House Planning and Decoration
59, 60g. Child Development
59, 60h. Household Management
59, 60i. Home Economics Education
59, 60j. Institutional Management

Members of the Departmental Staff

61. History of Costume.—A survey of the development of costume of men and women from the peoples of antiquity, through various periods of European history to the present time. Lectures, reading, and collection of illustrations. *One hour a week. One credit hour.* Miss Musgrave

63 (64). Nutrition.—Principles involved in normal nutrition at all ages. Prerequisite, Biochemistry 5, or Chemistry 51, 52. *Two hours a week. Two credit hours.* Mrs. Sweetman

65 (66). Dietetics.—Calculation and preparation of dietaries for normal individuals at all ages. Prerequisite for Home Economics students, a summer project in foods. †*Four hours a week. Two credit hours.* Mrs. Snyder

67 (68). Nutrition in Abnormal Conditions.—A study of the principles involved in adjusting diets in such diseases or other abnormal conditions as are benefited by variations from normal diets. Laboratory consists of demonstrations of nutritional deficiencies in animals. Prerequisite, Course 63. *Two or three credit hours.* Mrs. Sweetman

69 (70). Survey Examination.—A comprehensive examination to test the student's command of home economics and related subject matter, and her ability to integrate, organize, and present it. Preparation for the examination consists of the making and use of outlines and bibliographies in the major divisions of the field. *One credit hour.* Members of the Departmental Staff

71 (72). Supervised Teaching.—Directed teaching in home economics. Students teach classes in the junior high school at Brewer. *Two credit hours.* Miss Gould

73. 74. Supervised Field Teaching.—Observation, participation, and teaching for a two weeks' period each semester in a selected junior or senior high school in the State, under the immediate direction of the local teacher. *Two weeks full time. Two credit hours,* each semester. Miss Coney

75 (76). Apprentice Teaching.—Apprentice teaching in high school under the immediate supervision of a qualified local home economics teacher approved by the State Department of Education. Open only by selection in coöperation with the State Department of Education, to students chosen on the basis of their own request, their academic and personnel records, and the success of their teaching in Course 71. Students who complete this course successfully receive a vocational certificate. A *full semester. Sixteen credit hours.* Miss Coney

78. Advanced Home Economics Education.—A study of curriculum problems, budget, equipment, and classroom management. *Two hours a week. Two credit hours.* Miss Coney

81 (82). Institutional Foods.—Problems involved in the feeding of groups on a commercial basis, as menu planning, food buying, the application of food preparation principles to large-quantity cookery, use of large-scale equipment, quality standards. A faculty dining room is operated as a laboratory for the course. Prerequisites, Courses 5 and 6 Classroom, *one hour a week;* laboratory, **six hours a week. Three credit hours.*

Miss McCarthy

84. Institutional Foods Management.—Organization and management. Personnel management. Cost control. Equipment. Trips to inspect equipment. Prerequisite, Course 81 (82). Classroom, *two hours a week. Two credit hours.* Miss McCarthy

85 (86). School Lunch.--A study of the special institutional management problems of the school lunch. Laboratory practice in the planning, preparation, and serving of low-cost lunches. Lecture and laboratory, *arranged. One credit hour.* Miss McCarthy

87 (88). Institutional Foods Management Laboratory.—Managerial responsibilities in tea room and school-lunch service. Prerequisite, Course 81 (82). Laboratory, **three or six hours. One or two credit hours.*

Miss McCarthy

91. Costume Design.—Problems in dress design for various persons and occasions. Designing chiefly in pencil and water color. Prerequisite, Course 3. Laboratory, †*six hours a week. Three credit hours.*

Miss Musgrave

92. Costume Design.—Advanced dress design problems using a variety of mediums including paper, paint, and fabric. Draping course prerequisite or parallel. Laboratory, †*six hours a week. Three credit hours.*

Miss Musgrave

101 (102). Advanced Nutrition.—Methods of research in nutrition and recent advances in the field. Prerequisite, Course 63. Offered if sufficient demand. *Two or three credit hours, as arranged.* Mrs. Sweetman

103 (104). Advanced Foods.—Methods of research in food preparation and recent advances in the field. Prerequisites, Course 6 and Biochemistry 5. Offered if sufficient demand. *Two or three credit hours, as arranged.*

Mrs. Sweetman

HORTICULTURE

Professor Waring; Assistant Professor Clapp;
Assistant Professor Riley

General Courses

2. General Horticulture.—An introductory treatment of practices and related principles basic to the production of fruits, vegetables, and flowers, and to ornamental horticulture. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Waring

4. Plant Propagation.—Methods of propagating plants. Current literature on propagation is reviewed. A report on methods applicable to a particular branch of horticulture is required. Given in 1937-38 and alternate years. †*Four hours a week. Two credit hours.* Mr. Clapp

11. 12. Problems in Horticulture.—Open to upperclass students who manifest special interest and the capacity for individual effort. The consent of the instructor must be obtained in each case before registration. *Credit, arranged.* These courses may be repeated for credit.
Members of the Departmental Staff

14. Summer Practice.—Supervised practice in the gardens, greenhouses, nurseries, and orchards of the College. Short trips to specialized farms and florists' establishments may be included, and a trip of approximately four days' duration to inspect horticultural enterprises and estates in Maine and other New England states. Four weeks, close of spring semester, junior year. *Four credit hours.* Members of the Departmental Staff

51. 52. Seminar.—Critical reviews of literature in selected or assigned horticultural subjects, preparation of abstracts and papers, classroom presentation and discussion. Staff members and invited guests participate. *One or two hours a week* by arrangement. *Credit, arranged.* Mr. Waring

54. Plant Propagation.—A continuation of Course 4 into more advanced phases of the subject. Given in alternate years with Course 4. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.*
Mr. Clapp

Pomology

1. Fruit Handling.—The commercial apple industry and its methods in Maine and competing regions, with minor attention to other tree fruits.

Laboratory exercises include grading and packing and visits to commercial-scale orchards, packing houses, and storage plants. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. WARING

9. FRUIT JUDGING.—The selection of fruit, chiefly apples, for exhibition, the identification of varieties, and judging. The intensive training should ordinarily lead to participation in an intercollegiate apple-judging contest. Open to any interested student. **Six hours a week,* first nine weeks. *One credit hour.* MR. WARING

53. SYSTEMATIC POMOLOGY.—A survey of the species and important cultivated varieties of fruits and nuts, emphasizing botanical status as well as pomological classification, distribution, and use. Given in 1938-39 and alternate years. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. WARING

56. ADVANCED POMOLOGY.—An advanced treatment of principles and methods involved in the planting and management of orchards. Given in alternate years with Course 53. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. WARING

Vegetable Gardening

10. SMALL FRUITS.—A consideration of varieties, cultural methods, and handling of such fruits as strawberries, grapes, raspberries, blackberries, and blueberries. *Three hours a week. Three credit hours.* MR. RILEY

20. VEGETABLE GARDENING.—The best commercial practices; and the results of recent experimentation as applied to vegetable gardening. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. RILEY

21. VEGETABLE CROPS.—Includes harvesting, marketing, storage, and systematic study of types and varieties of vegetables; also care of vegetables for seed production. Prerequisite, Course 20. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. RILEY

25. VEGETABLE FORCING.—Culture of vegetables under glass, types of greenhouses, special soil management problems involved, marketing. Prerequisite, Course 20. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. RILEY

Floriculture and Ornamental Horticulture

3. TREES AND SHRUBS.—The plant materials used in landscape gardening, emphasizing identification, nomenclature, and the characteristics upon

which their special values for the purpose are based. Classroom, *one hour a week;* laboratory, **three hours a week. Two credit hours.* Mr. Clapp

5. Recreational Landscaping.—Materials and principles of landscape design with particular reference to recreational projects and roadside improvement. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Clapp

6. Landscape Gardening.—Principles of landscape design with particular reference to the home grounds. Observational trips to Bangor and Old Town may be required. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Clapp

7. Commercial Floriculture.—Principles underlying the production of flowers under glass; special consideration of methods for important cut-flower crops. One or more half-day trips in the Bangor area may be arranged. Prerequisite, Course 8. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Clapp

8. Home Floriculture.—The culture and care of garden flowers and house plants and the use of flowers in the home. Open to any student. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* Mr. Clapp

15. Landscape Gardening.—A continuation of Course 6 treating the development of irregular-surfaced areas, the farmstead, and large tracts; the design of recreational areas; and the professional phases of landscape architecture. A one-day trip to Mt. Desert Island is required. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Clapp

Graduate Courses

101. 102. Horticultural Investigations.—*Credit, arranged.* Members of the Departmental Staff

103. 104. Research Methods.—Application of scientific method and equipment to the solution of horticultural problems and preparation of manuscript for publication. *Usually, as arranged, two credit hours.* Mr. Waring

ALL DEPARTMENTS

Summer Projects.—A student in the College of Agriculture desiring to carry out a field project during the summer recess under faculty direction

may obtain credit for such work providing arrangement is properly made with the major department concerned and the project is successfully carried through to completion. Project work may be conducted during the summer recesses between the sophomore and junior years, and junior and senior years. Sophomore-Junior Project is designated Pj 2 and limited to one hour credit. Junior-Senior Project is designated Pj 4 and may be one, two, or three hours credit. Complete details concerning project work may be obtained from heads of departments in which major curricula are offered.

TWO-YEAR COURSE IN AGRICULTURE

DIRECTOR LORING

First-Year—Fall Semester

ANIMAL HUSBANDRY—DAIRY PRODUCTION.—A general survey of the field of dairy production and economic reasons for growth of the dairy industry. Breeds of dairy cattle and their care, feed, and management. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*
MR. HALL

BUSINESS ARITHMETIC.—A course in arithmetic based on the problems confronting the farmer in his business. *Two hours a week. Two credit hours.*
MR. LORING

FARM BOTANY.—Plant structure and tissues in their relation to plant growth and development and to agricultural practices. Classroom, *one hour a week;* laboratory †*two hours a week. Two credit hours.* MR. OGDEN

FARM CHEMISTRY.—A review of general chemistry; chemistry of plant and animal life as related to agriculture; fungicides and insecticides; gasoline and oil. *Two hours a week. Two credit hours.* MR. SMITH

FARM CROPS.—Practices in growing crops under field conditions. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*
MR. RALEIGH

FORGE WORK.—Forging; welding; tool-steel work. **Three hours a week. One credit hour.* MR. DAVEE

FRUIT HANDLING.—Picking, packing, grading, storing, shipping, and marketing of fruit, particularly the apple. A survey is made of the principal apple producing regions and of the general status of the industry. A small amount of systematic study of fruits and some fruit judging are in-

cluded. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. RILEY

POTATO PRODUCTION.—Consideration of the principles and practices involved in the production of potatoes under Maine conditions. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. LIBBY

POULTRY HUSBANDRY.—Origin and development of types, breeds, and varieties of poultry; care, feed, and management; housing, breeding, incubation and brooding; and marketing poultry products. Laboratory practice in judging poultry and eggs, and in grading and packing eggs. Killing, picking, and packing poultry. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. GARDNER

First Year—Spring Semester

CARPENTRY.—Graded exercises in woodworking designed to familiarize the student with tools used in modern woodworking practice and to give him experience in working from dimensioned drawings. †*Four hours a week. Two credit hours.* MR. SWIFT

DAIRY HUSBANDRY—GENERAL DAIRYING.—Milk secretion and composition; testing of milk and milk products; sanitary production and handling of milk from farm to consumer; cream separation; and buttermaking. Classroom, *two hours a week;* laboratory, †*four hours a week. Four credit hours.* MR. POPE

ENGLISH.—Part of the time is devoted to a review of grammar and to the principles of effective writing, with attention also to spelling and punctuation. Weekly papers, chiefly expository, are required. *Two hours a week. Two credit hours.* ENGLISH DEPARTMENT

FARM ECONOMICS.—An elementary course in the principles of economics as applied to agriculture. The following subjects are considered: development of commercial agriculture, price-making forces, production, land policies, farm credit, tariff, taxation, and agricultural organization. *Two hours a week. Two credit hours.* MR. NIEDERERANK

FRUIT GROWING.—Principles and practices which should be followed in choosing an orchard site, and in the subsequent planting and culture, pest control, and other care leading to the production of profitable crops. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. RILEY

POULTRY HUSBANDRY.—A continuation of the course given in the fall semester. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. GARDNER

SOILS AND FERTILIZERS.—Properties, management, and fertilization of soils in relation to fitting them for production of crops. Classroom, *three hours a week;* laboratory, **three hours a week. Four credit hours.* MR. LIBBY

Second Year—Fall Semester

ANIMAL HUSBANDRY—GENERAL ANIMAL HUSBANDRY.—Breeds, and care, feed, and management of horses, beef cattle, sheep, and swine. Laboratory work in judging horses, sheep, and swine. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. HALL

DISEASES OF FARM ANIMALS.—A general course including anatomy, physiology, hygiene, and sanitation. Methods for the prevention and control of the common diseases of domestic animals are given special attention. *Three hours a week. Three credit hours.* MR. WITTER

ENGLISH.—Instruction in practical uses of English, including business correspondence, with as much review of grammar as seems necessary. *Two hours a week. Two credit hours.* ENGLISH DEPARTMENT

FARM ENGINEERING AND MECHANICS.—Running farm lines, laying out drainage systems, and planning farm buildings and conveniences. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. SWIFT

FARM INSECTS.—A practical study of insects in their economic relationships to farm plants and farm animals. Classroom, *one hour a week;* laboratory, †*two hours a week. Two credit hours.* MR. DIRKS

FARM MANAGEMENT.—Factors that affect the profitable operation of the farm as a business unit including size of business; labor efficiency; crop rotation; farm layout, and production costs. Individual farming systems are studied. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* MR. NIEDERFRANK

POULTRY HUSBANDRY—POULTRY MANAGEMENT.—A general consideration of poultry management with especial reference to sanitation and disease. *Two hours a week. Two credit hours.* MR. GARDNER

VEGETABLE GROWING.—Production of vegetables for home use. Important commercial vegetables of New England. Handling of forcers, growing of seedlings, marketing, and other topics are included in as much detail as time will permit. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.* MR. RILEY

Second Year—Spring Semester

Animal Husbandry—Feeding Live Stock.—General principles underlying feeding of live stock; composition and characteristics of feed stuffs; calculating rations; and the best practices in feeding farm animals. Classroom, *three hours a week;* laboratory, †*two hours a week. Four credit hours.*
Mr. Hall

English.—A continuation, including reports, abstracts, and oral composition based on agricultural material. *Two hours a week. Two credit hours.* . English Department

Farm Crops.—Grass and forage plants, their culture and uses. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.*
Mr. Raleigh

Farm Machinery.—A course given to acquaint the student with the machinery adapted to farm use. Classroom, *two hours a week;* laboratory, **three hours a week. Three credit hours.* Mr. Meyer

Marketing Farm Products.—A course dealing with the economic problems in marketing farm products, with particular attention given to marketing Maine products, such as dairy and poultry products, apples, and potatoes. Time is also given to a study of the principles and methods of coöperative marketing. *Three hours a week. Three credit hours.* Mr. Niederfrank

Forestry.—The general principles of forestry with special reference and application to the farm woodlands, particularly in this region. Lectures and textbook work in elementary systems of cutting, estimating, protection, and reforestation. *Two hours a week. Two credit hours.* Mr. Chapman

Small Fruit Culture and Plant Propagation.—Strawberries, raspberries, blackberries, blueberries, cranberries, grapes, and some other fruits of minor importance in the Stae. Production and disposal of the crops are considered. Instruction is given in general propagation of plants. Classroom, *two hours a week;* laboratory, †*two hours a week. Three credit hours.*
Mr. Riley

HONORS COURSE

Attention is called to the tutorial honors course which is open to superior students in Agriculture and Forestry who may desire to supplement their field of concentration by study under individual tutorial guidance. A fuller description of this course is to be found at the beginning of the section, General Courses.

College of Arts and Sciences

PURPOSE

In an age which stresses the utilitarian and so-called practical interests of education, the College of Arts and Sciences reasserts its cultural objectives, its efforts to preserve the best that the past has bequeathed us, and its attempts to enrich and enhance human living. Our time calls preeminently for men and women of critical intelligence, broad and sympathetic understanding of human needs, and determination of purpose. The College of Arts and Sciences seeks, therefore, to train and inspire loyal and competent citizens to meet the demands of the present, and to enrich the life of their respective communities.

In addition to the obvious value of the social sciences in meeting contemporary needs, the College recognizes as indispensable the disinterested pursuit of knowledge and the free play of the mind in the region of literature and the other arts. It believes that no adequate and enduring human progress can be achieved if any essential part of human nature remains undeveloped.

Specifically, the College of Arts and Sciences conceives its task in terms of the particular needs of the various classes of students whose interests it seeks to serve. It offers, for example, a specific curriculum to those who contemplate entering the professional schools of medicine, dentistry, law, government, business, social work, and the arts. In collaboration with the School of Education, it offers specific training to prospective teachers.

In all cases, however, the College aims both at the production of useful skills and techniques and at the training of men and women who may be able and willing to turn their training toward socially desirable ends.

ADMISSION

The requirements for admission are given in full elsewhere in the catalog. They are practically the same as for other New England colleges and may be met by a four-year preparatory course in a good high school or academy. Graduates of Maine normal schools who are also graduates of an approved high school will receive sophomore standing.

The regular admission requirements will be applied to all students who enter with advanced standing. Students must make up all entrance requirements before registering as juniors. Those who transfer from other colleges must make them up within a year.

GRADUATION REQUIREMENTS

The work of the College of Arts and Sciences leads to the degree of Bachelor of Arts (B.A.). Beginning with the class of 1940, men students not excused from taking Military Science are required to complete 127 hours. For men required to take less than two full years of Military Science, the total of credit hours is reduced proportionately. All other students are required to complete 120 credit hours.

Every candidate for the degree is required to complete a basic course in English, in social science, and in mathematics and natural science. He is also required to elect a foreign language until he has passed a reading test. Seven hours of Military Science are required of men students. All women in the College take, in their freshman year, Elementary Hygiene, for which two credits are given. In addition, two years' work in Physical Training is required of all students, without credit.

Eighteen to twenty-four hours must be completed in the major field during the last two years. Ninety-five of the hours taken must be of C grade or better. No more than the equivalent of 130 hours, exclusive of Elementary Military Training, may be taken to satisfy this 95 hour C requirement. If a student transfers from another institution, he must also satisfy the 95 hour C requirement. Grades below C are not accepted from other institutions.

A satisfactory grade on the comprehensive examination is a requirement for the degree.

Students who transfer to this college as sophomores from another college of the University must complete one fourth of the total hours required in the college from which they transferred plus 94 in the College of Arts and Sciences (90 hours for the class of 1940 and succeeding classes); juniors must complete one half of the total hours, plus 63 (60 hours for the class of 1940 and succeeding classes); and seniors three fourths of the total hours, plus 32 (30 hours for the class of 1940 and succeeding classes). They must also satisfy the 95 hour C requirement. They will be required to do two full years' work in the College of Arts and Sciences before receiving the bachelor's degree, with the exception that students from the College of Technology may transfer after the junior year and be graduated in Arts and Scienecs after one year's work as major students in the Departments of Physics, Chemistry, or Mathematics; and students from the College of Agriculture may similarly transfer and be graduated as majors in the Department of Zoology.

FOREIGN LANGUAGE

Every student in the College of Arts and Sciences is required before graduating to demonstrate that he has mastered one foreign language well enough to be able to read and understand it with some ease. It is recommended that the student, unless he has special reasons, continue with a language which he has already studied in high school. If he has settled upon his major subject when he enters the University, he should ascertain the specific language preference in that field. Students entering with three years of French or four years of Latin normally meet the requirement by completing an additional year in either of these languages. In general, whatever the choice, it is expected that the requirement will be met before the beginning of the third year. Courses in language should be taken continuously until the examination has been passed.

Reading Tests in Romance Languages

1. For most students a reasonable preparation for taking a reading test in a Romance language shall be considered to be four years of work in high school or two years of work in college or the equivalent.

2. Students are not ordinarily expected to apply for a reading test more than twice in one year.

3. A reading test shall be given regularly early in January and early in May before the winter and spring registrations respectively.

4. In addition, a reading test shall be given the first Wednesday evening after upperclass registration especially for the following classes of students:

   a. Transfer students from Westbrook and other institutions who have not taken such a test previously.

   b. University of Maine students previously in residence who for some reason did not take the May test or who, having failed it, have made further preparation.

   c. Freshmen, wishing to be examined in French, (1) who have done more than three years of high-school work in the language, (2) who are of French-Canadian stock or have lived at some time in a French environment, (3) who can show evidence of having privately read to a considerable extent books and periodicals outside of those required in the course, (4) or who have unusual scholastic records and wish to be exempted from a language course to have their program free for other work.

   d. Freshmen, wishing to be examined in Spanish, whose previous record based on study and environment is deemed adequate by the Department.

THE FIRST TWO YEARS

The first two years of the student's college course constitute a unified period. On the one hand, they are in a very real sense a continuation of his preparatory school training and have the same general purpose of providing him some familiarity with the general streams of human knowledge, a broad and firm foundation of culture, and an adequate background for an understanding and appreciation of the needs of his community as well as competence to participate intelligently in its varied life. On the other hand, the first two years reach out toward the period of concentration with which the last two years are primarily occupied. They are designed to help the student to see his chosen field in perspective, but they also seek to give him the necessary preparation for undertaking the studies of a distinctly advanced nature. In brief the first two years are definitely exploratory. Their objective is dispersion rather than concentration, intelligence over an extended area of knowledge rather than proficiency in one particular region.

With these general principles in mind, freshmen are advised to elect courses from each of the following groups:

I. English. English 1 and English 2 or 18 are definitely required unless the student is admitted by the department to a more advanced course.

II. Foreign Language: Greek, Latin, French, Spanish, German. Students who pass a reading test in a foreign language may be excused from this requirement.

III. Social Studies: Social Science 1, 2, American History, Ancient Civilization, and European History. Students who do not wish to take further work in History may satisfy the social science requirement for the degree in the sophomore year by taking a basic course in Economics, Government, or Sociology.

IV. Natural Science and Mathematics: The requirements in this division may be satisfied by approved courses of six or eight hours of natural science or mathematics. The following are suggested: Physics 3 and Astronomy 10: Chemistry 1, 2; Geology 13, 14; Mathematics 1, 3, 6, or 1, 2, 3, or 17, 18, 19, 20, or 3, 17, 18, or 3, 19, 20, or 23, 24, or Course 1 in Mathematics and Courses 15, 16 in Astronomy, or Courses 1, 3 in Mathematics and Astronomy 10; Physics 1, 2; Zoology 1 and Botany 2, or Zoology 3, 4.

Military Science and Physical Training are required of all men unless they are physically disqualified.

Selected students may take advanced courses in Infantry during their junior and senior years. Six credit hours for the degree of Bachelor of Arts are granted for two years of advanced Military.

Physical Education and Hygiene must be taken by all women. For those students taking Military Science or Hygiene the maximum registration is

fifteen hours *exclusive* of these two subjects; for others the maximum registration is sixteen hours. Individual guidance is given to all freshmen in the selection of their courses.

During the sophomore year the student continues his general interest in exploration, but he naturally becomes more definitely concerned over the selection of his major subject. He should, therefore, add at least two new major fields of learning to those taken during the freshman year. This should insure for him some likelihood of a wise decision regarding his field of concentration because he will have had some experience in at least six different fields. Not more than six hours may normally be taken in one subject in either semester of the sophomore year. At the same time it is frequently wise to take more than one course in a prospective major subject, in order to test one's actual interest and to satisfy preliminary requirements for advanced work.

During the first two years a student must show evidence of ability to pursue upper-division courses successfully. Work of C grade or above will be interpreted as satisfactory. *Students with records consistently below this standard will be advised to withdraw from the University at the end of their sophomore year.*

Throughout the freshman and sophomore years the student is under the general supervision of the Dean of the College. The Dean is assisted in this capacity by a faculty committee of freshman-sophomore advisers whose purpose is to give each student individual guidance and attention during this period. A member of this committee will be assigned to each student as his adviser early in his freshman year.

THE LAST TWO YEARS

At some time during the second semester of the sophomore year, the student, in conference with the Dean, selects his major subject or field of chief academic interest, and outlines with his major instructor a tentative curriculum for his two remaining years. This special field is chosen without reference to departmental boundaries, though it may coincide with some department or special curriculum in the College. The department in which the major subject chiefly falls becomes for administrative purposes the student's major department, and the head of that department is his major instructor. The latter is responsible for the student before the faculty and must approve the student's registration.

At the same time the student selects his major adviser. This is regularly either the major instructor or another member of the department whom he

and the student agree upon, subject to the approval of the dean. Besides assisting the student in outlining his curriculum, the major adviser also directs his pursuit of it, recommends or approves all changes made in it, and acts as the student's registering officer.

The major curriculum is the nucleus of related courses selected by the student as representing his chief field of interest or major subject. It is restricted to a maximum of twenty-four and a minimum of eighteen hours in the junior and senior years, but it is expected that the remaining courses will be chosen with reference to their affinity with it, except as certain otherwise unrelated courses are recognized as desirable for all students on account of their cultural or practical value. No elementary or introductory courses may be included in the major curriculum, though such exploratory courses may be taken, with the major adviser's approval. In general it is assumed that upperclass students will be engaging themselves with courses of an advanced nature which will toughen their intellectual fibre and furnish a real test of their abilities.

Seniors shall be required to continue work in their major subject through their senior year.

COMPREHENSIVE EXAMINATIONS

In the spring semester of the senior year major students in some departments take comprehensive examinations in their major subject. The purpose of these examinations is to provide the student with an opportunity to demonstrate his knowledge of the salient features of his general field of study. It aims to make clear the unity of the field as a whole. It seeks definitely to counteract the easy tendency to separate courses from one another. It is, therefore, designed in such a way as to develop perspective and to encourage organization of materials as well as accuracy and range of knowledge. The student is thus able to evaluate his ability in the field of his major interest and to make a smooth transition to his professional and graduate work. A satisfactory grade on the comprehensive examination is a requirement for the degree.

HONORS PROGRAM

A program of Honors Work for the benefit of the superior student has been adopted by the College of Arts and Sciences. The purpose is to encourage exceptional ability by affording unusual opportunities for the

exercise of that ability and by rewarding high achievement with appropriate distinction. The opportunities are intended especially to stimulate originality, intellectual curiosity, and resourcefulness, and they require a large measure of self-reliance. The Honors courses do not involve the attending of classes, but are conducted by the tutorial method, according to which the student does his work under the supervision of a tutor, whom he meets in conference at regular intervals for advice and informal discussion. The rewarding distinction, which is the highest offered by the College of Arts and Sciences, is conferred upon the successful completion of all or a sufficient part of the Honors program, in the form of graduation Honors, which are of three grades: Honors, High Honors, Highest Honors.

Application for admission to any course in the Honors program should be made to the Dean of the College of Arts and Sciences. As a rule, a general average of B in the whole of the applicant's previous record will be required for admission, but each applicant will be judged according to his individual merit, especially as regards his possession of the particular qualities, such as initiative and self-reliance, which are deemed essential to success in Honors work.

The Honors program is divided into two parts: (1) Preparation for Honors Work, in the freshman and sophomore years, and (2) Honors Work, in the junior and senior years. Descriptions of the Honors Courses will be found on page 206.

PROFESSIONAL CERTIFICATES FOR TEACHERS

The Professional Secondary Certificate is granted for a period of two years to graduates of the College who have completed not less than eighteen semester hours in education, not more than six semester hours of which may be in the field of psychology. Courses recommended for satisfaction of this requirement are as follows: General Psychology, History of Education, Educational Measurements, Methods of Teaching in Secondary Schools, and Principles of Secondary Education or Practice Teaching. In addition, candidates are expected to complete a major and at least one minor teaching subject. Usual combinations are mathematics and science, French and Latin, English and history, English and French, history and Latin, English and Latin, and French and history. To be satisfactory, all of these required courses, both academic and professional, must be completed with a grade of C or better.

BANGOR THEOLOGICAL SEMINARY

Students in the College of Arts and Sciences have the privilege of registering for courses in Bangor Theological Seminary not to exceed five credit hours per semester, without payment of tuition charges, and a like privilege is extended by the College to students in the Seminary. The courses for which students may register must be approved by the Dean of the College, the President of the Seminary, and the instructor in the subjects concerned in both institutions. Such work may be counted toward graduation; but in order to avoid duplication of credits it is understood that all courses at the University of Maine which have been used by Seminary students for graduation credit at the Seminary shall be cancelled at the University in case the student is admitted to junior or senior standing as a candidate for the Bachelor of Arts degree.

SUMMER SESSION

Before students of the College of Arts and Sciences pursue Summer Session courses in any institution other than the University, they must gain the approval of the Dean in writing. A marked bulletin of the institution should be left at the Dean's office with a note requesting degree credit for the selected courses.

MARINE LABORATORY AT LAMOINE

The University, through the Zoology Department of the College of Arts and Sciences, offers a six-weeks course in marine invertebrate zoology at the Lamoine laboratory on Frenchman's Bay. The students collect and study the wide variety of types from every phylum of the invertebrate group. Course work is offered for both undergraduate and graduate credit. The nature of the course makes it possible for the student to receive the type of instruction which will best serve his or her special interest.

SPECIMEN CURRICULA

The following outlines of specimen curricula will provide the student with a general idea of the character of preparation recommended for various professions. They are suggestive and tentative rather than fixed or prescribed. The student's own interests and aptitudes will naturally determine to some extent his choice of subjects. Though only a few of the more im-

portant curricula in the College of Arts and Sciences are here given, there are a large number of others which may be procured by writing to the Dean of the College.

Specimen Major Curriculum for Premedical Studies

FRESHMAN YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Eh 1 English	3	Eh 2 English	3
*Gm 1 German	4	*Gm 2 German	4
Mt 1 Military Training	1½	Mt 2 Military Training	1½
Pt 1 Physical Education	—	Pt 2 Physical Education	—
†Zo 3 Animal Biology	4	†Zo 4 Animal Biology	4
Elective in Social Science	3	Elective in Social Science	3

* Two years of a modern foreign language, preferably German, are usually required for medical school admission, and should lead to a reading knowledge of the subject.

† Candidates who plan to enter medical school in two years and those who have a special interest in chemistry should take General Chemistry during the first year, with or without General Zoology. To fulfill the requirements of the American Medical Association, Organic Chemistry and Physics must be taken the second year. These, together with Comparative Anatomy or General Zoology, if the latter was not taken the first year, make a very heavy program. A four-year program leading to a B.A. degree is thus desirable and in most cases necessary. Candidates for admission to medical school should therefore be familiar with the requirements of several medical schools before planning their first-year program.

SOPHOMORE YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Ch 1a General Chemistry	4	Ch 2a General Chemistry	4
Gm 3 German	3	Gm 4 German (‡Gm 16, Scientific German)	3-2
Ms 1, 3 Trigonometry, College Algebra (or an approved elective)	4	Ms 6 Analytic Geometry (or an approved elective)	4
Mt 3 Military Training	2	Mt 4 Military Training	2
Pt 3 Physical Education	—	Pt 4 Physical Education	—
Zo 15 Comparative Anatomy	4	Zo 16 Comparative Anatomy	4

JUNIOR YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Ch 51 Organic Chemistry	5	Ch 52 Organic Chemistry	5
Eh 3 History of English Literature (or Eh 7 or an approved elective)	3	Eh 4 History of English Literature (or Eh 8a or an approved elective)	3
Ps 1a General Physics	4	Ps 2a General Physics	4
Py 1 General Psychology	3	Py 2 General Psychology	3

SENIOR YEAR

	Hrs.		Hrs.
Bt 45 Genetics (or Social Science)	3	Ch 40 Quantitative Analysis	4
Ch 31 Qualitative Analysis	5	Elective (preferably Social Science)	3-5
Zo 37 Physiology	4	Zo 18 Vertebrate Embryology	4
Zo 41 Histology	3	Zo 38 Physiology	4

‡ With the permission of the German Department.

Five-Year Curriculm in Liberal Arts and Nursing

College of Arts and Sciences in coöperation with
Central Maine General Hospital, Lewiston
Eastern Maine General Hospital, Bangor
Maine General Hospital, Portland

FIRST YEAR

University of Maine

	Hrs.		Hrs.
Eh 1 Freshman Composition	3	Eh 2 Freshman Composition	3
Fr 3 or 5 French	3-4	Fr 4 or 6 French	3-4
Pe 1 Physical Education	—	Pe 2 Physical Education	—
Py 1 General Psychology	3	Py 2 General Psychology	3
Zo 3 Animal Biology	4	Zo 12 Anatomy and Physiology	5
Sy 1 Sociology	3	Sy 2 Sociology	3

FIRST SUMMER IN HOSPITAL

(Six or eight weeks)*

	Hrs.	
Nursing Arts (including Orientation and Positive Health)	100	6 wk. course 6 day week
Materia Medica (Solutions and Dosage)	30	av. 4½ hr. da. 8 wk. course
History and Social Aspects of Nursing	30	6 day week av. 3½ hr. da.
	160	
Clinical Practice	96 hrs.	

SECOND YEAR

University of Maine

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Ch 5 Inorganic Chemistry	4	Bc 4 Organic Chemistry	4
Es 1a Principles of Economics	3	Es 2 Principles of Economics	3
Pe 3 Physical Education	—	Pe 4 Physical Education	—
Py 67 Child Psychology	3	Zo 18 Embryology	4
Zo 41 Histological Technique	3	Elective:	
Elective:			

SECOND SUMMER IN HOSPITAL

(Six or eight weeks)*

	Hrs.	
Nursing Arts (includes Advanced)	100	6 wk. course 6 day week
Materia Medica	30	av. 4 hrs. da. 8 wk. course
Professional Adjustments	15	6 day week av. 3 hrs. da.
	145	
Clinical Practice	96 hrs.	

*Opening date to be the same as that of the University of Maine Summer Session.

THIRD YEAR

Fall in University of Maine

	Hrs.
Bc 5 Biochemistry	4
By 1 and 3 Bacteriology	5
Eh 9 Modern Literature	2
Py 71 Abnormal Psychology	3
Elective:	

Spring in Hospital

	Hrs.
Case Studies—1 study monthly beginning with Spring Semester Third Year	
Communicable Diseases	16
Dietotherapy	15
Medical Nursing	45
O. B. Technique	10
Surgical Nursing	45
	131

FOURTH YEAR IN HOSPITAL

	Hrs.	
Emergency Nursing	15	
Eye, Ear, Nose, and Throat Nursing	16	
Gross. Pathology	8	By 10 Sanitation and Health 2 hrs.?
Physical Therapy	16	
Psychiatry	24	
Public Health Nursing	8	
Public Sanitation	8	

FIFTH YEAR

Fall in Hospital		*Spring in University of Maine*	
	Hrs.		Hrs.
Obstetrics	45	Py 72 Mental Hygiene	3
Pediatrics	60	Electives:	
		Ed 66 Educ. Measurements	
		Ed 78 Prin. and Methods	
		Sy 20 Intro. to Field of Social Work	

The remainder of the curriculum may be elected from the entire offering of the College.

Clinical Experience:

Experience on the wards during the two summers will be practice for the procedures taught in the classroom. During the two years spent at the hospital the student has experience approximately as follows:

6 months with medical patients
6 months with surgical patients
1 month in the diet kitchen
2 months in the operating rooms
6 weeks in the Genito-Urinary and Orthopedic out-patient depts.
6 weeks vacation
3 months at the Boston Lying-in Hospital
3 months at the Children's Hospital, Boston, Massachusetts

24 months

Specimen Major Curriculum for Pre-Legal Studies

FRESHMAN YEAR

Fall Semester		Hrs.	*Spring Semester*		Hrs.
Eh 1	Freshman Composition	3	Eh 2	Freshman Composition	3
Hy 3	United States History	3	Hy 4	United States History	3
Mt 1	Military Training	1½	Mt 2	Military Training	1½
Pb 1	Public Speaking	2	Pb 6	Persuasive Speech	2
Pt 1	Physical Education	—	Pt 2	Physical Education	—
	*Foreign Language	3-4		*Foreign Language	3-4
	Natural Science	4		Natural Science	4

SOPHOMORE YEAR

		Hrs.			Hrs.
Eh 7	Second-Year Composition	3	Eh 8a	Second-Year Composition	3
Es 1a	Principles of Economics	3	Es 2a	Principles of Economics	3
Gt 31	American Government	3	Gt 32	American Government	3
Mt 3	Military Training	2	Mt 4	Military Training	2
Pt 3	Physical Education	—	Pt 4	Physical Education	—
Py 1	Psychology	3	Py 2	Psychology	3
	Elective	3-4		Elective	3-4

JUNIOR YEAR

		Hrs.			Hrs.
Ba 9	Accounting	3	Ba 10	Accounting	3
Eh 3	History of English Literature	3	Eh 4	History of English Literature	3
Gt 83	American Constitution	3	Gt 84	American Constitution	3
Hy 17	History of England	3	Hy 18	History of England	3
Sy 1	Principles of Sociology	3	Sy 2	Principles of Sociology	3

* To be continued until the student has passed his reading test.

SENIOR YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Ba 51 Corporation Finance (or Ba 53, Money and Banking)	3	Ba 54 Investments and Investment Banking	3
Es 71 Public Finance	3	Es 52 Social Control of Industry	3
Es 73 Labor Problems	3	Es 74 Labor and Government (or Es 80, American Labor History)	3
Gt 51 Public Administration	3	Gt 52 Public Administration	3
Pb 3 Debating	2	Electives: Gt 74, Pl 4, Pl 10, Py 72, Sy 62	3
Py 75 Social Psychology	3		

Curriculum in Journalism

FRESHMAN YEAR

	Hrs.		Hrs.
Eh 1 Freshman Composition (or Eh 11, Freshman Literature and Composition)	3	Eh 2 Freshman Composition (or Eh 12, Freshman Literature and Composition or 18, Freshman Literature)	3
Hy 5 Survey of Western Europe (or Hy 3, United States History)	3	Hy 6 Survey of Western Europe (or Hy 4, United States History)	3
Foreign language	3-4	Foreign language	3-4
Mt 1 Military Training (Pe 21, Hygiene, women)	1½-2	Mt 2 Military Training or elective	1½-2
Natural Science or Mathematics	4	Natural Science or Mathematics	4
Pt 1 Physical Education	—	Pt 2 Physical Education	—

SOPHOMORE YEAR

Fall Semester

		Hrs.
Eh 3	History of English Literature (or Eh 43, Chief Writers of America for Eh 11 students)	3
Eh 23	Newswriting	3
Gt 31	American Government	3
Hy 3	or Hy 5, American or European History	3
Mt 3	Military Training	2
Pl 3	Philosophy (or foreign language)	3

Spring Semester

		Hrs.
Eh 4	History of English Literature (or Eh 46, Contemporary American Literature, for Eh 12 students)	3
Eh 24	Newswriting	3
Gt 32	American Government	3
Hy 4	or Hy 6, American or European History	3
Mt 4	Military Training	2
Pl 4	Philosophy (or foreign language)	3

JUNIOR YEAR

		Hrs.
Eh 25	The Newspaper in the 20th Century	3
Eh 45	Contemporary American Literature	3
Es 1a	Principles of Economics	3
Gt 33	Municipal Government and Administration	3
Hy 67	American Diplomacy	3

		Hrs.
Eh 28	Departmental or Feature Writing	2
Eh 46	Contemporary European Literature	3
Es 1a	Principles of Economics	3
Gt 36	European Government	3
Hy 68	American Diplomacy	3

SENIOR YEAR

		Hrs.
Eh 79	The Newspaper as a Factor in International Relations	3
Eh 57	Shakespeare	3
Gt 73	International Relations	3
Es	55, 69, 71, or 53	3
	Electives	3

		Hrs.
Eh 30	The Country Newspaper	3
Eh 58	Shakespeare	3
Gt 74	International Relations	3
Es	54, 56, 72, or 60	3
	Electives	3

Specimen Major Curriculum for Business Administration*

FRESHMAN YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Eh 1 Freshman Composition	3	Eh 2 Freshman Composition	3
Gc 1 Social Science	3	Gc 2 Social Science	3
Ms 23 Mathematical Analysis or Ps 3 Descriptive Physics	3	Ms 24 Mathematical Analysis or As 10 Descriptive Astronomy	3
Mt 1 Military Training	1½	Mt 2 Military Training	1½
Pb 1 Public Speaking	2	Pb 6 Persuasive Speech	2
Pt 1 Physical Training	—	Pt 2 Physical Training	—
†Foreign Language	4	†Foreign Language	4

SOPHOMORE YEAR

	Hrs.		Hrs.
Ba 9 Accounting	3	Ba 10 Accounting	3
Eh 7 Second-Year Composition	3	Eh 8a Second-Year Comp.	3
Es 1a Principles of Economics	3	Es 2a Principles of Economics	3
Gt 31 American Government	3	Gt 32 American Govt.	3
Mt 3 Military Training	2	Mt 4 Military Training	2
Pt 3 Physical Training	—	Pt 4 Physical Training	—
Py 1 General Psychology	3	Py 2 General Psychology	3

JUNIOR YEAR

	Hrs.		Hrs.
Ba 51 Corporation Finance	3	Ba 64 Investments and Investment Banking (or Es 64, International Trade and Finance)	3
Ba 53 Money and Banking	3	Es 52 Business and Govt.	3
Es 73 Labor Problems	3	Hy 60 Economic and Social History of the United States	3
Hy 59 Economic and Social History of the United States	3	Ms 20 Statistics	3
Ms 19 Statistics	3	Py 12 Advertising	3

SENIOR YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Ba 55 Business Law	3	Ba 56 Business Law	3
Ba 59 Business Management and Policy	3	Ba 60 Personnel Management	3
Eh 25 The Newspaper in the 20th Century	3	Ba 96 Seminar	2
Es 71 Public Finance	3	Es 62 Business Cycles (or Es 76 Public Utilities)	3
Ms 73 Adv. Statistics (or Ms 17, Mathematical Theory of Investment)	2-3	Gt 34 Municipal Govt. and Administration	3
		Ms 74 Adv. Statistics (or MS 18, Mathematical Theory of Investment)	2-3

* For further information concerning requirements and courses in Business Administration, see page 186.

† To be continued until the student has passed his reading test.

Specimen Major Curriculum for Pre-Professional Preparation for Social Work

FRESHMAN YEAR

	Hrs.		Hrs.
Eh 1 Freshman Composition	3	Eh 2 Freshman Composition	3
Gc 1 Social Science	3	Gc 2 Social Science	3
Mt 1 Military Training	1½	Mt 2 Military Training	1½
Pe 1 Physical Education	—	Pb 2 Public Speaking	2
Zo 3 Animal Biology	4	Pe 2 Physical Education	—
Zo 5 Hygiene (girls)	2	Zo 4 Animal Biology	4
Foreign language	3-4	Foreign language	3-4

SOPHOMORE YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Eh 3 History of English Literature	3	Eh 4 History of English Literature	3
Es 1a Principles of Economics	3	Es 2a Principles of Economics	3
Gt 31 American Government	3	Gt 32 American Government	3
Mt 3 Military Training	2	Mt 4 Military Training	2
Pe 3 Physical Education	—	Pe 4 Physical Education	—
Py 1 General Psychology	3	Py 2 General Psychology	3
Sy 1 Principles of Sociology	3	Sy 2 Principles of Sociology	3
*Foreign language		*Foreign language	

JUNIOR YEAR

	Hrs.		Hrs.
Eh 71 American Literature	3	Eh 52 American Literature	3
Es 73 Labor Problems	3	Es 52 Business and Govt.	3
Sy 61 Social Pathology	3	Sy 62 Criminology	3
Sy 65 Urban Sociology	3	Sy 20 Field of Social Work	3
Pl 3 Historical Introduction to Philosophy	3	Pl 4 Historical Introduction to Philosophy	3

SENIOR YEAR

	Hrs.		Hrs.
Gt 51 Public Administration	3	Gt 52 Public Administration	3
He 25 Economics of the Household	2	He 26 The Child in the Home	3
Py 71 Abnormal Psychology	3	Py 72 Mental Hygiene	3
Py 67 Psychology of Childhood	3	Sy 88 Population and Race Problems	2
Sy 81 Marriage and Family	3	Sy 96 Seminar	2
Sy 95 Seminar	2		

*If reading test has not been passed.

Specimen Curriculum for Majors in Chemistry

FIRST YEAR

Fall Semester	Hrs.	*Spring Semester*	Hrs.
Ch 1 General Chemistry	4	Ch 2 General Chemistry	4
Eh 1 Freshman Composition	3	Eh 2 Freshman Composition	3
Gm 19 German for Chemists	3	Gm 20 German for Chemists	3
Ms 1-3 Trigonometry and College Algebra or Ms 11, Freshman Mathematics	4	Ms 6 Analytic Geometry or Ms 12, Freshman Mathematics	4
Mt 1 Military	1½	Mt 2 Military	1½
Pt 1 Physical Training	—	Pt 2 Physical Training	—

(Select a registration of 16-17 hours from the courses listed for the second, third, and fourth years)

SECOND YEAR

Ch 41 Quantitative Analysis	4	Ch 32 Micro-Qualitative Analysis	5
Gm 21 German for Chemists	3	Gm 22 German for Chemists	3
Ms 7 Differential Calculus*	5	Ms 8 Int. Calculus*	5
Py 1 General Psychology†	3	Py 2 General Psychology†	3
Es 1 Principles of Economics‡	3	Es 2 Principles of Economics‡	3
Sy 1 Principles of Sociology‡	3	Sy 2 Principles of Sociology‡	3
Pb 1 Public Speaking	2	(Elective)	2-3
Mt 3 Military	2	Mt 4 Military	2
Pt 3 Physical Training	—	Pt 4 Physical Training	—

THIRD YEAR

Ps 1 General Physics*	5	Ch 22 Intro. Theor. Chem.	3
Ed 51 History of Ed. in U.S.†	3	Ps 2 General Physics*	5
Ed 59 Principles of Secondary Ed.†	3	Eh Technical Composition*	2
Es 9 Accounting‡	3	Ed 78 Prin. and Methods of Teach. in Sec. Schools†	3
Es 51 Corporation Finance‡	3	Py 66 Educational Psychology†	3
Elective	3	Es 10 Accounting‡	3
		Es 72 Labor Problems‡	3

FOURTH YEAR

Fall Semester		*Spring Semester*	
Ch 51	Organic Chemistry 5	Ch 52	Organic Chemistry 5
Ch	Elective 3	Ch 86	Seminar 2
Ps 17	Intermediate Physics* 3	Ch	Elective 3
Ed 65	Educational Measurements† 3	Ps 18	Intermediate Physics* .. 3
Ch 97	Methods Teach. Chemistry† 2	Es	Elected‡ 3
Ed 29	Practice Teaching‡ 3	Sy	Elected‡ 3
Sy	Elected‡ 3		Elective .....
Es	Elected‡ 3		
	Elective 3		

* Preparation for graduate study.
† Teacher training.
‡ Commercial option.
All chemistry courses required.

Courses of Instruction

Courses designated by an odd number are given in the fall semester; those designated by an even number, in the spring semesetr.

Courses numbered 1-50 are for undergraduates only; courses numbered 51-100 are primarily for upperclassmen and graduates; courses numbered above 100 are primarily for graduates.

When a course is offered in the first semester and also repeated in the second, it is designated by two numbers, the second of which is in parenthesis [e.g., 1 (2)].

When a dash is used between the two numbers (e.g., 1-2), both semesters must be taken to obtain credit; when a semi-colon is used (e.g., 1; 2), the first semester may be taken by itself, but the second cannot be taken unless the first semester is taken previously; when a period is used (e.g., 1.2), either semester may be taken for credit.

INTRODUCTION TO THE CURRICULUM

The tabular arrangement of courses given on the following page serves to give the student a general view of the academic organization of the College of Arts and Sciences. All graphic representations are to some extent arbitrary and misleading, yet our tabulation may help the student to observe the general outline of academic interests in the College as well as something of the affinity which the various subjects bear to one another. It is obvious at once, for example, that languages and literature belong to one group, but one gains some realization of the inter-relationship of languages and the scope of linguistic study by noting how the ancient languages are followed by the modern languages and these in turn by Comparative Literature and English with its various applications. The importance of arrangement is equally great, if not so readily apparent, in the case of the other divisions. Growing familiarity with these fields will make it increasingly clear that one subject by its very nature passes inevitably into another. The entering student will do well to study this table in making his first general acquaintance with the curriculum as a whole. The upperclassman will occasionally wish to view his education in a perspective beyond that of his own previous academic experience. It is hoped that this table will act sometimes as a corrective for too specialized training, sometimes as a visual demonstration of the essential unity of all knowledge, sometimes as a device for calling attention to intimate cultural and intellectual relationships.

ARRANGEMENT OF SUBJECTS IN GROUPS

ART HISTORY

Professor Huddilston

1. 2. Masterpieces of Art.—A general survey course covering the most distinctive values of art in the great periods, with special regard to architecture as a key to the spirit of the ages. Lectures and interpretations in the art gallery. Open to all students. *Three hours a week.*

3. Renaissance Art.—A study of some of the important Florentine and Venetian masters; the work is pursued not only for the art history but also for the broader values of the birth of the modern world. Lectures and reports based on a study of photographs. Given in 1938-39 and alternate years. Open to all students. *Two hours a week.*

4. Cultural America.—A course of lectures on the relation of the fine arts to our national spirit. Designed to throw light on the history of the United States and to stimulate a broader interest in art appreciation, particularly as affecting the public mind of today. *Two hours a week.*

5. Greek Art.—An intimate examination of the principles of Greek architecture and sculpture with a view to understanding the technique and achievements of the Greeks. Lectures and study in the collection of photographs and in the art gallery. Given in 1939-40 and alternate years. Open to all students. *Two hours a week.*

7. Chinese Culture.—A general survey of ancient China's intellectual and aesthetic ideals as reflected in her philosophy, painting, and pottery. Not open to freshmen. Given in 1939-40 and alternate years. *Three hours a week.*

9 (10). A Preface to Art History.—Lectures on the periods of art following the arrangement in the art gallery. Intended for beginners who desire a brief introduction to the study of architecture, sculpture, and painting. May be taken only one semester. Reading will supplement the lectures. *One hour a week.*

ASTRONOMY

Professor Willard; Associate Professor Jordan

The courses in astronomy aim to meet the demands of students seeking a knowledge of the subject for purposes of general culture, and for technical or professional uses. Opportunity is offered for students to acquire such in-

formation as will enable them to appreciate more fully the universe in which they live. Courses may be selected which provide instruction in instrumental astronomy and observatory practice.

10. Descriptive Astronomy.—An elementary course. The textbook is supplemented by informal lectures, illustrated by lantern slides and work in the observatory. Open to all students. *Three hours a week.* Mr. Jordan

11. Practical Astronomy.—A course arranged to meet the needs of engineering students, and consisting mainly of the theory and observations used in the conversion of time, the determination of terrestial latitudes, and the establishment of meridian lines. Open to students who have taken Mathematics 1 and 3. *Two and one-half hours a week.* Mr. Jordan

14. Navigation.—An elementary course dealing primarily with the determination of the position of a ship at sea. The material discussed in the course forms the basis of airplane navigation during long flights. Open to students who have a working knowledge of Trigonometry. *Two hours a week.* Mr. Jordan

15; 16. General Astronomy.—Designed for students in mathematics and physics and others wishing a more complete treatment of the subject than is possible in Course 10. Recitations, lectures, solution of problems, observations with instruments in the observatory. Open to sophomores, juniors, and seniors who have had Mathematics 1. Given in 1939-40 and alternate years. *Three hours a week.* Mr. Jordan

59; 60. Practical Astronomy.—The theory and use of the astronomical transit, zenith telescope, and equatorial; accurate determination of time and latitude. Open to students who have taken Mathematics 6, 7, 8, and Astronomy 10 or 15. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Jordan

CHEMISTRY

Professors Bradt, Brann, and Brautlecht; Associate Professors Jenness, Nolan, and Otto; Assistant Professor Gilliland;* Mr. Bogan; Mr. Martin; Mr. Osborn; Mr. Tomlin*

The Department of Chemistry opens to the general student of the liberal arts one of the principal avenues of approach to the understanding of Nature and of the manifold complexities of life in an advanced industrial society such as ours.

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*On leave of absence, 1938-39.

For those students who wish to pass beyond a general appreciation of chemical science and to attain the training necessary for entering one or other of the numerous occupations for which more advanced work in chemistry is prerequisite, the following vocational possibilities are suggested as representative:

a. *Industry and Municipal Service.* Graduates in chemistry are often in demand for non-laboratory positions in industries manufacturing or employing chemicals: positions as research librarians, purchasing agents, secretaries, personnel workers, salesmen, advertisers. They are also employed in laboratory positions as analysts for police departments, water works, gas companies, ice plants, and producers of fertilizers, insecticides, drugs, flavors, and many other commodities.

b. *Government Bureaus.* Many arts college graduates trained in chemistry are now holding positions in various government agencies such as the Patent Office, the Bureau of Chemistry, and the Department of Agriculture.

c. *Medicine.* Training in chemistry is prerequisite for entrance to medical and dental schools, and for such positions as those of technicians in hospitals, as well as for most branches of medical research.

d. *Education.* Students interested in the teaching of chemistry in secondary schools can readily qualify for this profession by the satisfactory completion of a program arranged through the coöperation of this department with the School of Education.

Students taking chemistry as a major subject in the College of Arts and Sciences must complete satisfactorily Courses 1, 2, 22, 32, 41, 51, 52, and 86. Some biological science is required, also some mathematics and physics.

1; 2. General Chemistry.—This course deals with the general principles of the science and the elements of qualitative analysis. Classroom (lectures, discussion and demonstrations), *two hours a week;* laboratory, (including recitations), *four hours a week.* One breakage card. *Four credit hours.* Mr. Bradt and Members of the Departmental Staff

22. Introductory Theoretical Chemistry.—This is an introductory course in the fundamental principles of chemistry designed to prepare students for physical chemistry. It is recommended to majors in chemistry and to premedical and predental students as well as other students desiring a second-year elective in the Department of Chemistry. Prerequisite, Course 1, 2. Classroom, *three hours a week. Three credit hours.* Mr. Jenness

32. Micro-Qualitative Analysis.—Systematic theoretical and laboratory study of the fundamental principle of analysis as applied to the common cations and anions. Analysis of unknowns. Microtechnique with-

out use of the microscope. Prerequisite, Course 1, 2. Lectures and recitations, *two hours a week;* laboratory. *eight hours a week.* Two breakage cards. *Five credit hours.* MR. OTTO

41. QUANTITATIVE ANALYSIS.—An introductory course illustrating the fundamental principles of gravimetric, volumetric, and electrolysis methods. Prerequisite, Course 32. Classroom, *one hour a week;* laboratory, *eight hours a week.* Two breakage cards. *Four credit hours.* MR. OTTO

51; 52. ORGANIC CHEMISTRY.—An introductory course dealing with aliphatic and aromatic compounds. Prerequisite, Course 32 or at least C grades in Course 1, 2. Classroom, *three hours a week;* laboratory, *four hours a week.* Two breakage cards. *Five credit hours.* MR. BRAUTLECHT

55. CONTEMPORARY CHEMISTRY.—A study of contemporary chemists and chemical theory. Prerequisite, Course 52. Lecture, *one hour a week. One credit hour.* MR. BRANN

71; 72. PHYSICAL CHEMISTRY.—The detailed study of fundamental principles of chemistry and their application to various fields. Lecture, recitations, and laboratory. Prerequisites, Course 41 and Physics 1, 2. Calculus is very desirable. Classroom, *three hours a week;* laboratory, *four hours a week.* One breakage card. *Five credit hours.* MR. BRANN, MR. MARTIN

86. JOURNAL SEMINAR.—A study of chemical literature and chemical methods. Prerequisite, Course 52 and senior standing. Classroom, *two hours a week. Two credit hours.* MR. NOLAN

97. 98. METHODS OF TEACHING CHEMISTRY.—A course for prospective teachers of chemistry which includes administration, supervision, costs; laboratory arrangement, equipment, maintenance and supplies; preparation of solutions, demonstrations, lesson plans, testing programs; texts, laboratory manuals; grading and scoring; bibliography. Text, problems, and journal assignments. For juniors, seniors, and graduate students. Prerequisite, Course 1, 2, or equivalent. Classroom, *two hours a week. Two credit hours.* MR. BRAUTLECHT

Other courses in the Department of Chemistry not listed here are described under the College of Technology.

CLASSICS

PROFESSOR HUDDILSTON; ASSISTANT PROFESSOR SMITH

Greek

MR. HUDDILSTON; MR. SMITH

The work in Greek is arranged with the idea of presenting several phases of ancient culture. Such courses are offered as will prove serviceable to the student of average interests, who, not having studied the ancient languages in the preparatory school, may desire to include in his college course some work bearing on the permanent contributions of the ancient Greeks to the civilization of ancient and modern times.

At present but one year of Greek language is offered; more will be given if there is sufficient demand.

1-2. BEGINNING GREEK.—The student reads Attic Greek from the first. Passages from Plato and the dramatists form the bulk of the course. *Four hours a week.* MR. SMITH

3. GREEK LIFE AND CULTURE.—A brief study of important features of the Greek legacy in art and literature. Assigned readings and lectures. Open to all students. *Two hours a week.* MR. HUDDILSTON

4. GREEK IDEALS.—The development of Greek thought from Homer down to the period of the Hellenistic philosophies. The social and aesthetic significance of the Greek festivals and the Athenian ideas of education and democracy receive special attention. Open to all students. *Two hours a week.* MR. HUDDILSTON

51. GREEK POETRY.—A general survey which does not presuppose any knowledge of the Greek language. The main attention is given to Homer and writers of the drama; considerable reading is done in English translation. Given in 1938-39 and alternate years. *Three hours a week.* MR. HUDDILSTON

Latin

MR. SMITH

The courses in Latin are planned with a double purpose—to give some understanding of the best that Rome achieved and to train students for high-school positions as teachers of Latin.

The first purpose is cultural. It introduces students to the forms of classic literature as exemplified by Cicero, Livy, Tacitus, and Pliny in prose, by Terence and Plautus in dramatic art, and by a selection from the masters of lyric poetry. In addition, the courses are planned to give an introduction to the thought of the leading minds at Rome with some appreciation of its permanent value, and a comprehension of the Roman Empire as a milestone in the advance of European civilization.

The courses are also designed to give such knowledge of the Latin language and methods of teaching as would be required of a well-trained secondary-school teacher. Prospective teachers and major students should take A courses.

5. Livy.—Selections from the *History of Rome*. Reading, with discussion of language and Roman history. *Three hours a week.*

6. Cicero and Horace.—Reading of the *De Senectute* with some attention to Cicero's religious thought; study of the lyric poetry of Horace. *Three hours a week.*

5A. 6A. Freshman Latin.—Course 5, 6 with appropriate composition added. *Four hours a week.*

7. 8. Latin Composition.—Equivalent to the composition work of 5A, 6A. *One hour a week.*

9. Tacitus.—Reading and discussion of the *Agricola* and the *Germania*. This course involves an introduction to the history of the Roman Empire. *Three hours a week.*

10. Terence and Plautus.—A study of the development and characteristics of Roman comedy as seen in the *Phormio* of Terence and the *Captivi* of Plautus. *Three hours a week.*

9A. 10 A. Sophomore Latin.—Course 9, 10 with appropriate composition added. *Four hours a week.*

21. 22. Latin Composition.—Accurate knowledge of syntax is stressed in the first semester and Latin rhetoric in the second. Either semester is open to students who have completed Latin 7, 8 or the equivalent. Essential for prospective teachers. *One hour a week.*

23. The Younger Pliny.—Life and conditions in the Roman Empire as revealed by the letters of a Roman senator of the first century. Given in 1939-40 and alternate years. *Three hours a week.*

24. Horace.—Roman life and literary criticism of the Augustan Age as revealed in the *Satires* and *Epistles*. Given in 1939-40 and alternate years. *Three hours a week.*

41. Roman Private Life.—The manners, customs, and everyday life of the Romans. Knowledge of Latin desirable but not essential. Open to the three upper classes. Given in 1940-41 and alternate years. *Three hours a week.*

51. 52. Teachers' Course.—The objectives, content, and methods of the secondary-school Latin curriculum. Discussion of principles, solution of problems, outside reading, and investigation of special topics. Given in case of adequate demand. *Three hours a week.*

62. The Latin Language.—A historical study of Latin forms and inflexions with a study of inscriptions. Given in 1940-41 and alternate years. *Three hours a week.*

ECONOMICS AND SOCIOLOGY

Associate Professor Kirshen (Acting Department Head); Professors Ashworth and Allen; Associate Professor Chadbourne; Assistant Professor Lamson; Mr. Knowlton*; Mr. Hobbah; Miss E. G. Wilson; Mr. Burtt

Coöperating members of the Department:

Mr. Dow, Head of the Department of History and Government

Mr. Niederfrank, Assistant Professor of Agricultural Economics and Farm Management

It is the purpose of Economics and Business Administration to assist the student in understanding the way in which society produces and regulates its wealth. Economics is a Social Science and as such it deals with the broad problems of any social system. Not only does the department encourage the student to select an occupation or profession, but it also wishes the student to be a thinking citizen capable of analyzing and solving the social problems of his time. To these ends the work of the Department is directed.

Students may major in one or any combination of three fields: (1) Economics, (2) Business Administration, (3) Sociology. A minimum of eighteen hours is required, excluding elementary courses.

Students may combine a major in the department with any other of the Social Sciences: Government, History, Philosophy, and Psychology.

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*Resigned, January 1, 1939.

Specific Requirements:

Economics: Es 1a, 2a, Principles of Economics, a prerequisite for all advanced courses unless waived by the head of the Department; Es 96, Seminar, for senior majors.

Business Administration: Es 1a, 2a, Principles of Economics, a prerequisite for all advanced courses unless waived by the head of the Department; Ba 9, 10, Accounting; Ba 96, Seminar, for senior majors.

Sociology: Sy 1, 2, Principles of Sociology, a prerequisite for all advanced courses in sociology unless waived by the instructor; Sy 95, 96, Seminar, for senior majors.

Senior majors in the department are required to take an oral comprehensive examination and present a satisfactory thesis in the spring semester.

Economics

1a; 2a. Principles of Economics.—A study and analysis of the fundamental characteristics and institutions of modern economic society. The principles underlying the production, distribution, and consumption of wealth are considered. *Three hours a week.*

Mr. Ashworth, Mr. Allen, Mr. Knowlton, Mr. Hobbah, Mr. Burtt

1b; 2b. Principles of Economics.—A short course similar to Course 1a; 2a, for students in Technology and Agriculture. *Two hours a week.*

Mr. Ashworth, Mr. Knowlton, Mr. Hobbah, Mr. Burtt

52. Business and Government.—This course deals with the extension of government control over business activities for the purpose of social welfare, economic reform, and business recovery. *Three hours a week.*

Mr. Burtt

62. The Business Cycle.—Theories of the nature, prediction, and control of the business cycle. Given in 1940-41 and alternate years. *Three hours a week.*

Mr. Hobbah

64. International Trade and Finance.—Theory of international exchange; free trade versus protection. Barriers to foreign trade: tariffs, bounties, embargoes, quotas, and exchange restrictions. Recent trade policies of the United States will be considered. Given in 1940-41 and alternate years. *Three hours a week.*

Mr. Chadbourne

69. Modern Economic Systems.—A survey of socialism, communism, and fascism. The organization of agriculture, labor, capital, and trade is compared with those of the capitalist state. Not offered in 1939-40. *Three hours a week.*

Mr. Burtt

71. Public Finance.—The following topics will be considered; government activities and government expenditures, taxation and tax systems, budgets and other means of regulating and controlling government spending, and current problems of taxation. Juniors and seniors only. *Three hours a week.* Mr. Ashworth

72. Taxation in Maine.—A study of taxation, expenditures, and the public debt in the State of Maine. Juniors and seniors only. *Three hours a week.* Mr. Ashworth

73. Labor Problems.—A study of problems arising out of the relationships of employers and employees in modern industrial society. Special attention will be given to labor legislation and unionism. Juniors and seniors only. *Three hours a week.* Mr. Burtt

74. Labor and Government.—A study of government and labor relationships in the United States and abroad. Labor in democracies and distatorships and the development of labor law and labor legislation are the topics to be considered. Given in 1940-41 and alternate years. *Three hours a week.* Mr. Burtt

76. Public Utilities.—A study of those industries "affected with a public interest." Problems considered include valuation of the plant, cost of producing the service, pricing of the service, the development of regulation, duties toward the public, organization and management. Given in 1939-40 and alternate years. *Three hours a week.* Mr. Hobbah

80. American Labor History.—A study and analysis of selected periods in the history of American unionism including a discussion of the origin and development of the native working-class philosophy. Given in 1939-40 and alternate years. *Three hours a week.* Mr. Burtt

91. Development of Economic Thought.—A survey of the economic thinking of the Canonists, Mercantilists, and Physiocrats, and of a selected group of economists from the time of Adam Smith to the present day. The influence of the earlier ideas on contemporary economic thought, institutions, and problems is emphasized. Not offered in 1939-40. *Two hours a week.* Mr. Hobbah

92. Economic Theory.—A study of contemporary price and distribution theory as a tool in economic analysis. *Three hours a week.* Mr. Hobbah

95. 96. Seminar.—*Two or three hours.* The Departmental Staff

Business Administration

9; 10. ACCOUNTING.—The study and practice of the principles of accounting used in business. Since the course does not presume any knowledge of double-entry bookkeeping, a considerable part of the first semester's work is devoted to fundamental principles. Balance sheets and income statements, depreciation, reserves, sinking funds, partnership, and corporation problems are the principal topics of the second semester. *Three hours a week.*

MR. CHADBOURNE

16. BUSINESS LAW.—A study of the basic legal principles of business transactions. The nature of law, the enforcement of law, contracts, agency, and bailments are given special consideration. For juniors and seniors in Technology and Agriculture only. *Three hours a week.*

MR. KIRSHEN

51. CORPORATION FINANCE.—The position of the modern business corporation is studied from the financial point of view. Corporate securities, intercorporate relations, underwriting, financial plans, management and control are a few of the basic problems considered. *Three hours a week.*

MR. KIRSHEN

53. MONEY AND BANKING.—The monetary and banking systems of the United States and other countries; special emphasis on the relation of banking to business. Juniors and seniors only. *Three hours a week.* MR. CHADBOURNE

54. INVESTMENTS.—The course deals with the selection of investments, with a study of the proper types of investments for dependents, the business and professional classes, and institutions. The different types of securities and their relative merits are analyzed. An investigation is also made of the social and practical aspects of the investment banking business. Suggested preparation, Courses 1a, 2a, 51 and 53. Given in 1939-40 and alternate years. *Three hours a week.* MR. CHADBOURNE

55; 56. BUSINESS LAW.—This course is more advanced than Course 16 and includes, in addition, damages, negotiable instruments, guaranty and suretyship. Seniors only. *Three hours a week.* MR. KIRSHEN

57. TRUST AND CORPORATION POLICIES.—A study of the combination movement, the anti-trust laws, and the part played by the corporation. Present tendencies in American policies will be considered. Not offered in 1939-40. *Three hours a week.* MR. KIRSHEN

59. BUSINESS MANAGEMENT AND POLICY.—An analysis of the *functions* of management; the formulation and execution of business policy. *Three hours a week.* MR. HOBBAH

60. Personnel Management.—A course on the selection, training, and management of personnel in private and public business. Designed for the student interested in admininstration, office management, or personnel work in education, business, engineering, public service, and other fields. *Three hours a week.* Mr. Dow

95. 96. Seminar.—*Two or three hours a week.*
The Departmental Staff

Sociology

The sociology curriculum focuses the student's attention upon social relationships as phenomena capable of objective analysis. This is achieved through a study of (1) structure and function of society, as observed in social groups, institutions, codes, communities, and strata; (2) the dynamics of social change, as found in invention, cultural diffusion, and population trends; and (3) social disorganization, as reflected in dependency, crime, and community breakdown.

Sociology courses serve as useful background for students planning to enter (1) public social service work, as in state, county, or city welfare departments; (2) private social work, as in family welfare and child-care agencies; (3) probation and crime prevention; (4) public-health nursing; (5) youth-serving groups; (6) social research; and (7) social science teaching. A specimen curriculum in preprofessional preparation for social work appears on page 174 of this catalog.

Students majoring in sociology are required to take Sy 1; 2 and a minimum of eighteen hours including the Seminar, Sy 95. 96.

1; 2. Principles of Sociology.—An introductory course furnishing basic data concerning the structure and functioning of human societies. Communities, groups, races, codes, institutions, stratification and social mobility are considered. Prerequisite for other courses unless otherwise specified. *Three hours a week.* Mr. Lamson, Miss Wilson, Mr. Niederfrank

20. The Field of Social Work.—An examination of the place of public and private social service work, historical backgrounds and present trends. Types of social work; medical, psychiatric, family case, and group work. Social work as a profession discussed in relation to courts, clinics, schools, hospitals, and social settlements. Visiting lecturers and field trips. Prerequisite, Sociology 1, 2 or permission of instructor. Offered in 1940-41 and alternate years. *Three hours a week.* Mr. Lamson

61. Social Pathology.—A survey of typical varieties of social maladjustment. Desertion, divorce, illegitimacy, prostitution, poverty, public and

private methods of poor relief, unemployment, child labor, old age, mental disease, mental defect, suicide, and community disorganization are considered. Field trips. Prerequisite, Sociology 1, 2 or permission of instructor. *Three hours a week.* MR. LAMSON

62. CRIMINOLOGY.—A study of the characteristics, causes, and treatment of crime, including mental, physical, economic, and social factors; case studies of juvenile delinquents and criminals; the relation of race, nationality, age, and sex to crime; theories and forms of punishment and rehabilitation; methods of crime prevention. Field trips to jails and prisons. Prerequisite, Sociology 1; 2 or permission of instructor. *Three hours a week.* MR. LAMSON

65. URBAN SOCIOLOGY.—A study of city life and some of its problems. The role of the city and urbanization in civilization; the effects of urban environment upon social institutions and codes; rural-urban contrasts in health, crime, religion, education, personal and social disorganization; social areas within the metropolitan region; housing; zoning; recreation; and mobility are considered. Field trips. Prerequisite, Sociology 1, 2 or permission of instructor. Given in 1939-40 and alternate years. *Three hours a week.* MR. LAMSON

81. MARRIAGE AND THE FAMILY.—A course designed (1) to reveal the basic nature of these social institutions; (2) to show the specific trends which they are undergoing; and (3) to prepare for intelligent participation in family life. Courtship, mate selection, marriage preparation, husband-wife and parent-child relationships are studied. Juniors and seniors only. *Three hours a week.* MR. LAMSON

87. SOCIAL EVOLUTION AND SOCIAL CHANGE.—Analysis of the evolutionary aspects of associations, institutions, and mores in human society. Social and cultural dynamics, invention, cultural diffusion, and theories of progress are studied in relation to the question of social causation. Not offered in 1939-40. Prerequisite, Sociology 1, 2 or permission of instructor. *Two hours a week.* MR. LAMSON

88. POPULATION AND RACE.—A study of the factors involved in the composition, growth, and control of population. Birth and death rates, quality of peoples, eugenics, theories of population, migration, population and war, race relations and minority groups are considered. Prerequisite, Sociology 1; 2 or permission of instructor. Given in 1939-40 and alternate years. *Two hours a week.* MR. LAMSON

94. RURAL SOCIOLOGY.—A general course in the study of rural life. Subjects to be considered are standard of living and welfare of rural people; rural population; farm tenancy; the town and village; rural organizations

and rural leadership; and the probable sociological effect of the adjustment of agricultural production, soil conversation, resettlement, and other governmental measures on rural life. This course is offered as Fm 94 in the Department of Agricultural Economics and Farm Management. *Three hours a week.* MR. NIEDERFRANK

95. 96. SOCIOLOGY SEMINAR.—*Two or three hours a week.* MR. LAMSON

ENGLISH LITERATURE AND COMPOSITION

PROFESSORS ELLIS, TURNER, AND SMALL; ASSOCIATE PROFESSOR ASHBY*; ASSISTANT PROFESSORS SCAMMAN, CROSBY,† FLEWELLING, COGGESHALL, AND WHITNEY; MR. REYNOLDS; MRS. CRANDON; DR. WENCE; DR. SANDERLIN; MR. HAWTHORNE; MISS BAXTER; MISS OLIVER

Major subjects may be selected in English literature, American literature and history, journalism or creative writing, comparative literature, or dramatics (in conjunction with the Department of Public Speaking). A specimen curriculum in journalism may be found on page 171; others may be had upon request.

A major field may likewise be selected which will comprise courses in English and in some other subject, provided that unity exists between them. Obvious examples are English and history, or English and any foreign literature.

Students preparing for library work or employment with publishing houses should become acquainted with modern foreign languages and European and contemporary literature. English majors planning to enter the civil service, social service work, salesmanship, advertising, or professional schools in theology or law should build up a strong supporting minor in the social sciences: economics, government, history, and sociology; and in psychology. For all students majoring in English, an acquaintance with English and American history, philosophy, elementary German, and elementary psychology is recommended. English literature majors are required to take Hy 17, 18 or pass an examination in English History, set by the English Department.

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*On leave of absence, spring semester, 1939.

†On leave of absence, fall semester, 1938-39.

Students intending to pursue major programs in English should have completed the prerequisite courses Eh 3, 4 and Eh 7 or 8 or their equivalent, before the close of their sophomore year. A grade of C or better is expected in Eh 3, 4, and in eighteen hours of the major curriculum.

The departmental comprehensive examinations comprise written examinations in the mechanics of writing and in the history of English literature, late in the junior year; a critical report on the study of some selected author, early in the senior year; and an oral and written examination covering the student's advanced courses in his major field, in his final semester. Beginning with the Class of 1940, the senior oral examination will be a test not only of the student's knowledge of his special field but of his general culture as well. A passing grade in the written examinations is required for graduation.

Students pursuing major curricula in other departments who intend to offer English as a second teaching subject in secondary schools should prepare themselves by taking courses Eh 3, 4; 7 or 8; 57 or 58; 43 or 44; and 22 when offered. Eh 67 is also strongly recommended.

Courses in Composition and Rhetoric

1. Freshman Composition.—An intensive course in expository writing, for students in all colleges. Stress is placed upon correctness, clarity, and ease of expression and upon the organization of material. Frequent themes and conferences. Required of all freshmen not excused by the Department and prerequisite, with English 2, for all other English courses, except by special permission. *Three hours a week.*

Note: Freshmen who are particularly deficient in the fundamentals of grammar, sentence structure, and spelling are required to attend special tutoring groups in addition to the regular work of the course.

Mr. Turner (Chairman) and Members of the Department

2. Freshman Composition.—Description, narrative, letters, expositions based on library reading. The second semester of Freshman English for those students whose grade in English 1 is below C+; elective for others. *Three hours a week.*

Mr. Turner (Chairman) and Members of the Department

5 (6). Technical Composition.—A study of the forms of writing of greatest professional usefulness to engineers, agriculturists, and foresters. The forms of business correspondence, the construction of reports, and prep-

aration of technical papers. *Not open to students in the College of Arts and Sciences. Two hours a week,* fall or spring semester.

Mr. Scamman (Chairman), Mr. Reynolds

7. 8. Second-Year Composition.—In the fall semester the writing of essays and reports, with a study of the informal essay; in the spring, descriptive and narrative writing with a study of the short story. Recommended for sophomores; either Eh 7 or Eh 8 is required of those who expect to select a major in English literature. *Three hours a week.*

Mr. Whitney (Chairman), Mr. Ashby, Mr. Flewelling

77. 78. Creative Writing.—An advanced course for students who have shown exceptional interest and ability in some field of writing. The types selected will vary in different years. Accepted for graduate credit only by special permission from the Graduate Faculty. Prerequisite, completion of English 7 or 8 with honor grade. *Three hours a week.*

77a. The Short Story.—Fall semester. Mr. Whitney

78b. The Familiar Essay.—Not given in 1938-39. Mr. Whitney

77 (78)c. Verse Writing.—Not given in 1938-39. Mr. Ellis

77 (78)d. The One-Act Play.—Given in spring semester, 1939. Mr. Whitney

Courses in Literature

3. 4. History of English Literature.—A study of English literature from the beginning to the present time, tracing its historical development and acquainting the student with the chief writers and their work. Readings, recitations, and lectures. English 3, 4 is prerequisite for all advanced courses in English literature. *Three hours a week.*

Mr. Reynolds, Mr. Wence, Mr. Sanderlin

9 (10). Modern Literature.—A study of specimens of literature of contemporary interest, with the design of cultivating the appreciation and enjoyment of good reading. *Not open to students in Arts and Sciences. Two hours a week,* fall or spring semester.

Mr. Scamman, (Chairman), Mr. Small,
Mr. Reynolds, Mr. Hawthorne

11. 12. Freshman Literature and Composition (Honors Course).—In the fall, a study of the chief types of contemporary literature; in the spring, a sequence of literary works of world importance. Practice in theme writing of expository, descriptive, and narrative types. Open only to freshmen excused from English 1. *Three hours a week.*

Miss Crosby, Mr. Whitney, Mrs. Crandon

18. Literature for Freshmen.—The reading and study of works of literature representing the chief literary types: fiction, essays, poetry, and drama, with several exercises in composition. This course may be elected instead of or in addition to English 2 by freshmen who have completed English 1 with a grade of C+ or better. *Three hours a week.*

Miss Crosby (Chairman), Mr. Turner, Mrs. Crandon, Mr. Sanderlin, Mr. Hawthorne

37 (38). Tennyson and Browning.—Primarily a reading course, with much class discussion. An important aim is the cultivation of a fondness for poetry in the student. Given in 1939-40. *Two hours a week.*

Mr. Turner

41 (42). Present-Day Writers of Maine.—A study of twentieth-century writers whose works reflect the Maine scene or character. Among the poets and prose writers included are E. A. Robinson, Edna St. Vincent Millay, Robert P. T. Coffin, Mary Ellen Chase, Kenneth Roberts, Gladys Hasty Carroll, Rachel Field, and Owen Davis. Given in the spring semester, 1939. *Two hours a week.* Mr. Ellis

43 (44). Chief Writers of America.—A study of the principal writers of the United States in the nineteenth century, with some attention to Edwards and Franklin in the eighteenth. *Three hours a week,* fall or spring semester. Mr. Flewelling

45. 46. Contemporary Literature.—A study of present-day tendencies and production in poetry, drama, and the novel. The fall semester is devoted to contemporary British literature, the spring to American. *Three hours a week.* Mr. Flewelling

For Courses 51-100 inclusive, Eh 3, 4 is prerequisite, except for Dean's List students whose grades in English have been satisfactory and who have the instructor's permission to enroll. These courses may, with the approval of the Graduate Faculty, be taken for graduate credit by any qualified student who has already completed satisfactorily a full advanced course in the Department.

53 (54). Chaucer.—A study of selections from the *Canterbury Tales* and the chief minor poems, stressing the reading of Chaucer as poetry, his literary range and qualities, and the picture of his time given in his works. *Three hours a week.* Given in the spring semester, 1938. Miss Crosby

55. 56. Nineteenth Century Poetry.—In the first half, the poets of the English Romantic Movement—Wordsworth, Coleridge, Byron, Shelley, and Keats—are considered; in the second, those of the Victorian Age, especially Tennyson, Browning, Arnold, and the Pre-Raphaelites. Given in 1939-40 and alternate years. *Three hours a week.* Mr. Turner

57. 58. SHAKESPEARE.—A brief consideration of the English drama prior to Shakespeare, followed by a careful study of several of his most important plays and the reading of others. Attention is given to Elizabethan stage conditions and the dramatic work of Shakespeare's contemporaries. *Three hours a week.* MR. ELLIS, MR. SMALL

59. 60. NINETEENTH CENTURY BRITISH PROSE.—A study of the chief non-fiction prose writers of the nineteenth century, with attention to form and to the ideas conveyed. The authors principally treated are Coleridge, Lamb, Hazlitt, De Quincey, Carlyle, Macaulay, Arnold, Ruskin, Newman, Huxley, Pater, Stevenson, and Butler. *Two hours a week.* MR. WENCE

61. 62. HISTORY OF THE ENGLISH DRAMA.—In the first half, the development of the drama in England from the miracle plays through the Elizabethan period. In the second half, subsequent tendencies from the Restoration period to the present day, with special emphasis upon contemporary drama. Given in 1938-39 and 1939-40. *Three hours a week.* MR. ASHBY, MR. SMALL

63. ELIZABETHAN LITERATURE.—A pro-seminar course, treating the non-dramatic poetry and prose of the sixteenth century, with particular attention to the poetry of Spenser. *Three hours a week.* Given in 1940-41. MR. ASHBY

64. MILTON AND HIS TIME.—A pro-seminar course. Chief emphasis is laid upon the life and work of John Milton, studied against the background of the literature of the seventeenth century to the Restoration of the Stuarts. Given in 1940-41. *Three hours a week.* MR. ASHBY

65. 66. RESTORATION AND EIGHTEENTH CENTURY LITERATURE.—A study of the evolution of neo-classicism and its transition into the early Romantic Movement, as shown in the various types of literature that flourished in this period. Given in 1939-40 and alternate years. *Three hours a week.* MR. ASHBY

71. 72. AMERICAN LITERATURE.—A study of the development and history of American literature, including the political, social, and religious ideas which it reflects. *Three hours a week.* MR. ELLIS

81. 82. THE ENGLISH NOVEL.—This course traces, in the first semester, the history of the English novel from the medieval prose romances to the death of Scott. Beginning with Dickens and Thackeray, the second semester treats the Victorian novel in considerable detail and makes some study of recent British novelists. Given in 1938-39 and alternate years. *Three hours a week.* MR. TURNER

101. 102. GRADUATE SEMINAR.—Given when there is sufficient demand. Subject and credit vary.

Courses in Journalism

23-24. News Writing and Editing.—A study of news as defined by the practice of the metropolitan daily. Class discussions and exercises. The mechanics and theory of copy-desk editing. Laws affecting the press: libel and contempt of court. Standards and ethics. Open to sophomores and upperclassmen. Prerequisite, English 1, 2; History 3, 4 or 5, 6. *Three hours a week.* Mr. Coggeshall

25. The Newspaper in the Twentieth Century.—The history of the American press. The newspaper as a social institution and as an organ of political opinion. Prerequisites: a minimum grade of C in English 23, 24; History 5, 6; Government 31, 32, or consent of the instructor. *Three hours a week.* Mr. Coggeshall

28. Departmental or Feature Writing.—Practice in various forms of specialized writing for daily and weekly newspapers, feature sections, etc. Assignments will vary according to the objectives of individual students. Prerequisites: a minimum grade of C in English 23, 24; 25, or consent of the instructor. Given in 1939-40 and alternate years. *Two hours a week.* Mr. Coggeshall

30. The Country Newspaper.—A study of the administrative, mechanical, and editorial problems of the weekly journal. The course will be associated as far as possible with the weekly newspapers of the State. Prerequisite: a minimum grade of C in English 23, 24, or consent of the instructor. Given in 1938-39 and alternate years. *Three hours a week.* Mr. Coggeshall

79 (80). The Newspaper as a Factor in International Relations.—News as a world commodity, censorship and propaganda, the work of the foreign correspondent; the press and public opinion as a factor in precipitating war; the problem of international negotiation and the demand for publicity. Prerequisites: a minimum grade of C in English 23, 24; History 5, 6; 54; 67, 68; or consent of the instructor. Given in 1938-39. *Three hours a week.* Mr. Coggeshall

Courses in Linguistics

51; 52. Anglo-Saxon.—A study of Anglo-Saxon grammar and reading of easy prose and poetry. Reading of the Anglo-Saxon epic *Beowulf* in the second semester. Lectures on the literature of the Anglo-Saxon period. Not given in 1938-39. *Three hours a week.* Mr. Small

67. History of the English Language.—English words and their background; a study of the changes in sounds, forms, and meanings that have produced our contemporary English. *Two hours a week.* Mr. Small

Courses in Comparative Literature

Cp 73; 74. Literary Criticism.—A study of literary practices and standards from Aristotle to the present, including American criticism. The reading not only of works of criticism, but also of some of the recognized masterpieces of Continental literature to which critical principles have been most frequently applied. Given in the fall semester, 1938-39. *Three hours a week.* Mr. Ashby

Cp 75. 76. European Literature.—A survey of European literature from Homer to the present, showing the relationship among the literatures of different epochs and countries. The first semester comes down to the Renaissance; the second, to the present. Course 76 may not be taken separately except by permission. Foreign language majors may substitute other readings for works treated in their major courses. No knowledge of foreign languages is required. *Three hours a week.* Mr. Turner

(See also Fr 51, 52; Gk 51; Gm 59 (60); Sp 57, 58.)

Courses in the Teaching of English

22. Teaching of English in the High School.—A consideration of the chief problems confronting the teacher of high-school English composition and literature. The presentation of the different literary types; essentials and methods in composition; choice of texts, sequence of literary readings, and other topics. Not given in 1939. *Two hours a week.* Miss Crosby

Ed 29a. Supervised Student Teaching of English.—(See School of Education.) For approved senior tutors. *Two hours a week,* first or second half of fall semester. *One credit hour.*

GEOLOGY AND GEOGRAPHY

These and other courses in Geology are described under the Department of Civil Engineering in the College of Technology.

Ce 12. Economic Geography.—Deals with the principles of geography, especially applied to the common economic products, treating their distribution, characteristics, and uses. Given in 1938-39 and alternate years. Classroom, *three hours a week. Three credit hours.* Mr. Trefethen

Ce 13. Physical Geology.—Introduction to general dynamical geology; it covers the materials, agents, and processes of geology. Classroom, *three hours a week. Three credit hours.* Mr. Trefethen

Ce 14. Introduction to Regional Geography.—A survey course designed to give a general understanding of the natural and cultural aspects of the major geographic regions of the world. Classroom, *three hours a week. Three credit hours.* Mr. Trefethen

Ce 17. Economic Geology.—Introduction to ore deposits; their characteristics, distribution, production, and uses of both metals and non-metals. Classroom, *two hours a week. Two credit hours.* Mr. Trefethen

Ce 18. Historical Geology.—A review of the earth's history; its past land distribution, mountain revolutions, rock formations, climates, and living forms. Classroom, *three hours a week. Three credit hours.* Mr. Trefethen

Ce 19. Advanced General Geology.—A study of the common rocks and minerals and geologic processes. Designed for students who are considering further work in geology and students who expect to teach science in the high schools. Prerequisite, Ce 13 or Ce 16. Classroom, *two hours a week;* laboratory, *two hours a week. Three credit hours.* Mr. Trefethen

Ce 79. Structural Geology.—Principles and characteristics of earth structures. Prerequisite, Course 25. Given in 1938-39 and alternate years. Classroom, *two hours a week. Two credit hours.* Mr. Trefethen

GERMAN

Professor Drummond; Associate Professor Klein; Assistant Professor Miles

The Department of German offers the student an opportunity to become acquainted with the great literature of a foreign nation.

In addition to its cultural worth, German has a great practical value for students who intend to do research work in literature, history, economics, philosophy, and especially in the natural sciences, since a great deal of scientific literature is written in German.

Special courses, too, are offered for those students who desire to obtain a good writing and speaking knowledge of German.

1-2. First-Year German.—A course for beginners. Grammar, composition, translation, conversation. Credit is not given for less than a year's work to students in the College of Arts and Sciences. *Four hours a week.* Mr. Drummond, Mr. Klein, Mr. Miles

3. 4. Short Story.—For students who have had Course 1, 2 or the equivalent. Translation, composition, grammar review. *Three hours a week.* Mr. Drummond, Mr. Miles

5. 6. The Drama.—For students who have had Course 3. 4 or the equivalent. A study of the German drama including selections from such eighteenth and nineteenth century writers as Lessing, Schiller, Hebbel, Kleist, Hauptmann. Lectures and discussion. *Three hours a week.* Mr. Drummond

7. 8. The Novel.—For students who have had Course 5, 6 or the equivalent. Critical reading of novels by such authors as Goethe, Meyer, Ludwig, and Sudermann. Lectures and essays. *Three hours a week.* Mr. Klein

13. 14. Elementary German Composition and Conversation.—For students who have had Course 1, 2 or the equivalent. *Two hours a week.* Mr. Miles

15. 16. Scientific German.—Open only to students whose previous study of German will enable them to read scientific German with profit. *Two hours a week.* Mr. Klein

17. 18. Advanced German Conversation and Composition.—For students who have had Course 13, 14. *Two hours a week.* Mr. Klein

19-20. German for Chemists.—A beginning course in German for students in the Colleges of Agriculture and Technology, and for students in the College of Arts and Sciences who intend to major in Chemistry. The reading matter is chiefly in chemical German with incidental stress upon grammar. *Three hours a week.* Mr. Klein, Mr. Miles

21; 22. German for Chemists.—Continuation of Course 19, 20, which is prerequisite. Should be taken by students who take Course 19, 20. *Three hours a week.* Mr. Klein, Mr. Miles

The following courses are given when there is sufficient demand.

51. 52. Studies in Eighteenth Century Literature.—Special attention is given to the life and works of Klopstock, Lessing, Wieland, Goethe, and Schiller. Critical study of assigned works, lectures, and discussions. *Two hours a week.* Mr. Drummond

53. 54. Goethe.—Lectures on the life and work of Goethe, with a critical study of Faust. *Three hours a week.* Mr. Drummond

55. 56. Studies in Nineteenth Century Literature.—The various literary movements of the nineteenth century; lectures, discussions, outside reading. *Two hours a week.* Mr. Klein

57. 58. Seminar.—A study of some special topic in German literature. *Two hours a week.* Mr. Drummond, Mr. Klein

59 (60). History of German Literature.—Lectures in German, outlining the history of German literature. Recitations, outside reading. *Three hours a week,* fall or spring semester. Mr. Drummond

The department is also prepared to give, when there is sufficient demand, the following courses: 61. 62. Early New High German; 101. 102. Gothic: Introduction to the Study of Germanic Philology; 103. 104. Old High German; 105. 106. Middle High German.

HISTORY AND GOVERNMENT

Professor Dow; Associate Professors Whitmore and Wilson; Assistant Professor Morrow; Dr. McReynolds

Major Students. Since students concentrate in History and Government in preparation for widely divergent occupations, the major requirements of the Department have been given considerable flexibility. Pre-law students, those planning to enter the civil or diplomatic service, and those interested in state or city administrative positions are advised to take advanced courses in government, modern history, and economics. For theology, emphasis should be placed on ancient and medieval history with supporting courses in philosophy and English. Students looking forward to library work or to connections with publishing companies will find that, in addition to medieval and modern history, courses in foreign languages and literature are valuable. Majors in History or Government who plan to go on with the subject in graduate school should have a knowledge of French and German.

Students majoring in History or Government are expected to complete at least eighteen hours of work in approved courses. Courses Hy 1-6; 21, 22, Gt 31, 32 do not count as major courses under ordinary circumstances. For the purposes of the major, the courses of the Department will be considered in three divisions or fields of specialization: (1) European History, (2) American History, (3) Government. Having chosen his field of specialization, the student takes at least two approved courses (four semesters) in that division. Students who expect to specialize in European or American History should complete Hy 3, 4 and Hy 5, 6 by the close of their sophomore year. Those who expect to specialize in Government, or History and Government, should complete Gt 31, 32 and Hy 3, 4 or Hy 5, 6 by the close of their second year. Principles of Economics and Sociology are strongly recommended for prospective majors in History and Government. Students may combine a major in History or Government with any other of the Social Sciences: Economics, Philosophy, Psychology, and Sociology.

Courses numbered under eleven are open to freshmen; those numbered above fifty are not open to freshmen or sophomores except by special permission from the head of the Department.

Teacher Training. Students in the School of Education or College of Arts and Sciences who expect to offer History as a teaching subject should take Courses 3, 4, 5, 6, and six hours of advanced work previously approved by the head of the Department. Grades should be C or better in all courses. Many teachers are called upon to teach Civics, Citizenship, or Current Events courses, and consequently, Gt 31, 32 (or 36) is advised for this purpose. Subjects commonly combined with History for teaching purposes are English, French, Latin, science, or mathematics.

History

History includes in one continuous narrative the story of mankind so far as it is known. Courses offered by the Department of History and Government are limited to selected periods which seem significant for the present generation. History is more than "past politics"—it includes economic, social, intellectual, artistic, and scientific events. It deals with ages, races, and social movements, attempting to interpret its materials in such a way as to throw light on our present complex civilization and the future course of events.

1. 2. Ancient Civilization.—A study of the achievements of the Greeks and Romans in laying the foundations of Western life and thought with some attention to Egyptian and Eastern civilization as the background of classical culture. An important part of the course lies in the emphasis that is given to Greek thought and Roman rule in the midst of which Christianity sprang up. Readings, lectures, and notebook. Open to all students. *Three hours a week.* Mr. Huddilston

3. 4. United States History.—From the organization of the new government in 1789 to recent years. The work will cover such topics as the development of democracy, growth of the West, slavery and sectionalism, the Civil War, reconstruction, the making of modern America, industrialization, and imperialism. *Three hours a week.* Mr. Whitmore

5; 6. Survey of Western Europe.—This course is designed to show how modern Europe and its civilization came into existence. The work will include such subjects as the history of the Church, the medieval empire, the growth of towns, evolution of the Western State System, the expansion of Europe, cultural and economic changes, and the World War. *Three hours a week.* Miss Wilson, Mr. Morrow

17. 18. History of England.—From earliest times to the present. The political aspects are emphasized, with some attention to social and economic factors. Stress is placed upon the development of parliamentary government and the evolution of modern England and the British Commonwealth of Nations. *Three hours a week.* Mr. McReynolds

21 (22). Current World Problems.—A course designed for those who wish to be intelligently informed on world affairs, but do not make history their major subject. Lectures and discussions on outstanding problems of history, government, and politics. Open to all students in the University except freshmen. *Two hours a week.*

53. Europe from 1815 to 1870.—This course will be concerned chiefly with the origins and the development of economic and political liberalism, the growth of modern nationalism, and the achievement of political democracy in Europe. The effect of these developments upon the literature and thought of the nineteenth century will be studied briefly. Prerequisite, Course 6. *Three hours a week.* Miss Wilson

54. Europe Since 1870.—The causes of the World War are sought in a study of nationalism, imperialism, and the international anarchy which these engendered. A study of the treaties of 1919 and their effects is a part of a brief survey of current European problems. Prerequisite, Course 6. *Three hours a week.* Miss Wilson

57. American Colonial History, 1607-1688.—The founding and the political, social, and economic development of the colonies in the seventeenth century. English colonial policy of the Commonwealth and the Restoration periods. Permission of the instructor required. *Two hours a week.* Mr. Whitmore

58. American Colonial History, 1689-1789.—A study of the development of the colonies in the eighteenth century, including their western expansion, imperial relations, intercolonial relations, development of self-government. Emphasis is placed on the remote and immediate causes and the results of the American Revolution. Permission of the instructor required. *Two hours a week.* Mr. Whitmore

59. 60. Economic and Social History of the United States.—A study of economic and social movements in the United States from the colonial period to the present. Included are such topics as colonial production and commerce; agricultural development in the South and West; commerce, labor, and agriculture in the machine age. Prerequisite, six hours of history or economics. *Three hours a week.* Mr. McReynolds

62. Maritime History of the United States.—Ships and trade from Colonial days to the present, with emphasis on shipbuilding and shipping in New England, New York, and Maryland. The following topics are illustrative: famous ships and ship builders; evolution from wood to iron and steel ships; California and the clippers; the effect of the Civil War and the World War on our merchant marine. Permission of the instructor required. *Two hours a week.* Mr. Whitmore

67. 68. American Diplomatic History.—An account of the relations of the United States to the outside world. Such policies will be examined as the Monroe Doctrine, Pan-Americanism, and the "Open Door." Attention will be paid to our attitude toward the acquisition of territory, arbitration, limitation of armaments, and the League of Nations. Prerequisite, Course 3, 4 or 31. *Three hours a week.* Mr. Morrow

77. 78. The Middle Ages.—A more advanced study of the period from 500 to 1500 than is undertaken in Course 5, 6. Special emphasis will be given to a study of medieval institutions and to social and economic matters. The Byzantine empire, Slavic Europe, and the westward advance of the Asiatic peoples will be studied as an introduction to modern problems in the Near East. Prerequisite, Course 5. *Three hours a week.* Miss Wilson

79. 80. Cultural and Intellectual History of Europe, 400-1500.—This course follows the declines and advances of civilization from the end of the Roman period to the beginning of modern times. Such subjects will be considered as the science, religion, and philosophy of the transition period; contacts with Mohammendan civilization; the scientific renaissance; the rise of universities; art and architecture; and humanism and the Italian renaissance. Prerequisite, Course 5. *Three hours a week.* Miss Wilson

81. 82. The Far East.—An account of the culture, history, politics, and international relations of China and Japan, leading to an appraisal of the present situation in the Far East. Special attention is given to Russian and American policy in Asia and the problems created by Japan's promotion of a "Monroe Doctrine" for Asia. Prerequisite, six hours of history. *Two hours a week.* Mr. McReynolds

101. 102. Seminar.

64. Canadian History will be given in case of sufficient demand.

Government

The study of government, or political science, covers the activities of governing agencies from towns and cities to international bodies. It is concerned with the origin and development of political institutions and their

social effects, and with the possibilities for improvement. As the activities of present-day governments are almost countless and affect the citizen at every moment, political science is closely related to all the social sciences, especially to economics, sociology, and psychology. Like other social studies, it is deeply rooted in history.

The primary purpose of instruction in government is to train college students for active and intelligent citizenship. Those who do not enter public life themselves will be able as citizens to help raise the level of governmental efficiency.

Public Service Training. With the rapid expansion of government agencies and services there has come an added need for public servants with basic training in government and administration. A large proportion of the public hold elective or administrative offices at some time during their careers. Opportunities for trained men and women in public service are increasing. This is especially true of such fields as city management, health administration, public welfare, and financial administration. Advanced technical or professional training is required for many positions, but basic undergraduate training in government is valuable in all instances. A broad viewpoint and cultural background can be attained at the same time, which will be useful in any occupation entered.

Specimen Curricula have been prepared in the following subjects and are obtainable from the Dean of the College of Arts and Sciences:

Pre-legal Training
Foreign Service
Public Administration

31. 32. American Government.—A course dealing with the national, state, and local governments and the functioning of the American party system. The historical development and practical operation of political institutions will be viewed in their relation to present problems of a legislative, judicial, or executive nature. *Three hours a week.* Mr. Dow

33 (34). Municipal Government and Administration.—A survey of the governmental structure and functions of American municipalities, and a careful analysis of existing conditions. Special study is given to administrative problems arising from such functions as police, education, charities and correction, finance, public works, and city planning and zoning. Prerequisite, Course 31. *Three hours a week.* Mr. Dow

35 (36). European Government.—A study of governments, political parties, and current problems in the leading nations of Europe, such as Great Britain, France, Germany, Italy, and Russia. Prerequisite, Course 31. *Three hours a week.* Mr. Dow

51; 52. Public Administration.—The practical problems of administration in the modern state. The development of administration; principles of departmental organization and control; administrative law; public relations; personnel; financial administration. Lectures, laboratory, and field trips to governmental agencies. Prerequisite, Course 31, 32. *Three hours a week.* Mr. Dow

73. 74. International Relations.—A study of the fundamental realities which underlie international relations, and of the rules which govern them, with illustrative material taken from recent and current events and policies. Prerequisite, six hours of history or government. *Three hours a week.* Mr. Morrow

83; 84. The American Constitution.—The origin and development of our constitution, from 1787 to the present. Lives of famous judges; court organization and procedure; regulation of commerce; protection of life, liberty, and property—these are typical of the subjects studied. Prerequisite, Course 3, 4, or 31, 32. *Three hours a week.* Mr. Dow

101. 102. Seminar.

The following courses will be given in case of sufficient demand:—35. Principles and Problems of Government; 87; 88. International Law; 99; 100. Political Theory.

See also Personnel Management, under the department of Economics and Sociology.

HONORS COURSES

Freshman Year

Gh 46. Freshman Tutorial Readings.—The purpose of this course is to assist the freshman in discovering his special interests and aptitudes. The tutor will seek to further this purpose by informal questioning and discussion and by the assignment of appropriate reading. Given only in the spring semester. *Two credit hours.*

Sophomore Year

Gh 47. 48. General Reading.—This course is designed to make the student acquainted with some of the great books of the world—that is to say, *readable* books of established reputation, particularly those which have figured

prominently in the history of occidental culture. These may be of all types, and be concerned with a great variety of subjects, scientific as well as literary. The reading will be confined in the main to a prescribed list, but this list will be extensive enough to allow the student abundant freedom of choice and sufficient opportunity to indulge his special interests. *Three credit hours.*

Junior Year

Gc 49. 50. Tutorial Honors.—This general course when elected by students in the College of Arts and Sciences may be used in one of three ways: (1) for the pursuit of some subject outside of the student's major field, (2) for a continuation of the Honors reading program of the freshman and sophomore years, or (3) for the pursuit of some subject in the student's major field in anticipation of the Major Honors course of the senior year. Application for admission to this course should be made to the Dean of the College. See also Tutorial Honors under the heading General Courses. *Two credit hours.*

Senior Year

Gh 53-54. Major Honors.—This course is the culmination of the Honors program. Coming at the close of this program, it is expected to afford evidence of the extent to which the student has profited by Honors work, and to offer him an opportunity to manifest the qualities that this work is intended to develop. It requires him to make an intensive study of some special subject within his major field and to embody the results of this study in a substantial thesis. Both semesters are needed for this undertaking. *Three credit hours.*

MATHEMATICS

Professor Willard; Associate Professors Bryan and Jordan; Assistant Professors Lucas, Stewart, and Kimball; Mr. Lamoreau; Mr. Todd; Miss Hobson

The function of the Department of Mathematics is two-fold. On the one hand the Department offers courses to students who are interested in mathematics as a preparation for research and the profession of teaching. It prepares such students to undertake graduate study in mathematics or to teach the subject in the secondary school. The Department also supplies adequate mathematical foundation for students in the College of Arts and

Sciences who are interested in the application of mathematics to the study of the physical, biological, and social sciences.

On the other hand it acts as a service department for the Colleges of Technology and Agriculture. In this capacity it furnishes the students of those colleges with sufficient training in mathematics to enable them to carry forward successfully their technical studies.

Freshman students who are well qualified both as to ability and training will be placed in advanced sections. Such students will be selected by the Department, and will take the freshman Courses 11 and 12, followed, in the sophomore year, by Courses 7a and 8a.

Students whose major subject is mathematics are required to take Courses 1, 2 (unless offered for admission), 3, 5, 6, 7, 8, and to elect other courses to a total of not more than forty hours. At least twelve hours are to be chosen from courses in mathematics numbered 50 or above, and Astronomy 15, 16, 59, and 60. Mechanics 51 and 52 may be substituted for ten hours of the latter group. Astronomy 11 may be taken as a mathematics elective. Students majoring in mathematics who intend to teach are advised to elect Courses 19, 20, 26, 63, and 64 as well as several courses in physics.

1. Trigonometry.—The trigonometric functions, radian measure, functions of two or more angles, logarithms, trigonometric equations, inverse functions, solution of right and oblique triangles. *Two hours a week.*

Mr. Bryan, Mr. Jordan, Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Lamoreau, Miss Hobson

2. Solid Geometry.—Solid and spherical geometry, including original demonstrations and the solution of numerical problems. Open to all freshmen who have not offered solid geometry for admission. *Three hours a week.*

Miss Hobson

3. College Algebra.—A brief review of radicals, the theory of exponents, logarithms, quadratic equations, the binomial theorem, determinants, theory of equations. *Two hours a week.*

Mr. Willard, Mr. Bryan, Mr. Jordan, Mr. Lucas, Mr. Stewart, Mr. Lamoreau, Mr. Todd

5. Advanced Algebra.—Topics in college algebra not covered in Course 3. Open to students who have taken Courses 1 and 3, and to freshmen with especially good high-school preparation. *Three hours a week.*

Mr. Kimball

6. Analytic Geometry and Calculus.—The point, line, circle, and conic sections. Differentiation of algebraic and elementary transcendental

functions with applications to maxima and minima and rate problems. Open to students who have had Courses 1 and 3. *Four hours a week.*

Mr. Willard, Mr. Bryan, Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Lamoreau, Mr. Todd, Miss Hobson

7. Differential Calculus.—Differentiation of algebraic functions and of the elementary forms of transcendental functions, successive differentiation, differentials, rates, maxima and minima, expansion of functions, series. Open to students who have taken Courses 1, 3, and 6. *Five hours a week.*

Mr. Willard, Mr. Jordan, Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Lamoreau, Mr. Todd

8. Integral Calculus.—A continuation of Course 7. Integration of the elementary forms; integration as a summation; various methods of integration. Applications of differential and integral calculus. *Five hours a week.*

Mr. Willard, Mr. Bryan, Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Lamoreau

9; 10. Algebra, Trigonometry, and Their Applications.—A course designed to meet the needs of freshman students in Forestry. *Two hours a week.*

Mr. Lucas, Mr. Stewart, Mr. Kimball, Mr. Lamoreau, Miss Hobson

11, 12. Freshman Mathematics.—Course 11 consists of an intensive review of algebra and trigonometry followed by a brief course in analytic geometry. Course 12 covers the material of Course 7 (Differential Calculus) with the exception of series and expansion of functions. Open to students selected by the Department. *Four hours a week.*

Mr. Kimball, Mr. Lamoreau

7a, 8a. Calculus.—These courses are designed for students who have had Courses 11 and 12. At least one-half of the spring semester will be devoted to differential equations and their applications to engineering problems. *Four hours a week.* Mr. Lucas, Mr. Kimball, Mr. Lamoreau

13. Spherical Trigonometry.—An elementary course with problems and applications to spherical astronomy. Not given in 1938-39. *Two hours a week.* Mr. Kimball

17; 18. Mathematical Theory of Investment.—A study of interest, discount, annuities, amortization, the valuation of bonds, sinking funds and depreciation, building and loan associations; also the theory of probability and its application to life annuities and life insurance. Throughout the course numerous problems are solved to illustrate the theory and to fix the principles involved. *Two hours a week.* Mr. Stewart

19; 20. Statistics.—The various topics in statistics will be introduced by illustrative material from the fields of economics, business and public administration, and applied science. The course is designed to enable the general student critically to evaluate and understand the preparation, presentation, and interpretation of statistical material. *Two hours a week.* Mr. Bryan

23; 24. Introduction to Mathematical Analysis.—A general introductory course in mathematics for freshmen in the College of Arts and Sciences especially for those who are interested in the physical, biological, and social sciences. It consists of a coördinated development of topics in algebra, trigonometry, analytic geometry, and introductory calculus. *Three hours a week.* Mr. Bryan

26. College Geometry.—An elementary course in modern synthetic geometry. The nine-point circle, harmonic section, poles and polars, Ceva's theorem, Menelaus's theorem are among the topics considered. Emphasis is placed on the solution of original exercises. *Three hours a week.* Mr. Kimball

51. Advanced Analytic Geometry.—Review of the fundamentals of Course 6; advanced theory of the conic sections; the general equation of the second degree in two variables; transformation of coördinates; polar coördinates; higher plane curves. Given in 1939-40 and alternate years. *Three hours a week.* Mr. Kimball

52. Solid Analytic Geometry.—An introductory course. Among the topics considered are coördinates in three-dimensional space; lines and planes; types, classification, and properties of quadric surfaces; transformation of coördinates. Given in 1939-40 and alternate years. *Three hours a week.* Mr. Kimball

53; 54. Advanced Calculus.—Continuation of Course 7, 8. Partial differentiation and its applications; application of calculus to solid geometry; series, including power series and Fourier series; double and triple integration, line integrals; complex numbers, hyperbolic functions. *Three hours a week.* Mr. Lucas

55. Differential Equations.—A course in the solution of ordinary differential equations and their applications. Emphasis is laid on the methods used in solving equations of the common types. Open to students who have taken Course 7, 8. *Three hours a week.* Mr. Willard

61. History of Mathematics.—A chronological survey of the important developments in mathematics from the beginnings of the subject to the present time. Lectures, reference studies, and recitation. Prerequisites, Courses 1, 3, 6, 7. Courses 2, 8, 26 and a reading knowledge of French and

German are desirable. In the case of experienced teachers, certain of the above prerequisites may be waived. Given in 1939-40 and alternate years. *Three hours a week.* MR. BRYAN

63; 64. TEACHERS' COURSE IN MATHEMATICS.—A study of the kind of mathematics suitable for the secondary school from the point of view of modern mathematics. Through conference, students who so desire may make a study of the teaching of college mathematics. Prerequisites, Courses 1, 3, 6, 7. In the case of experienced teachers, certain of the above prerequisites may be waived. Given in 1939-40 and alternate years. *Three hours a week.* MR. BRYAN

68. THEORY OF NUMBERS.—A study of the elements of the theory of algebraic numbers. The discussions will consider the divisibility of integers, congruences, and quadratic residues. Admission by consent of the instructor. Given in 1938-39 and alternate years. *Three hours a week.* MR. BRYAN

The Department is also prepared to give the following courses, which may be offered when there is sufficient demand: 65. THEORY OF EQUATIONS; 66. MODERN PROJECTIVE GEOMETRY; 71; 72. MODERN HIGHER ALGEBRA; 73; 74. ADVANCED STATISTICS; 101. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE; 102. ELLIPTIC FUNCTIONS; 105. VECTOR ANALYSIS; 109. CELESTIAL MECHANICS; 110. HYDRODYNAMICS; 115. THEORY OF FUNCTIONS OF REAL VARIABLES; 116. FOURIER'S SERIES; 117. THEORY OF SUBSTITUTION GROUPS AND OF ALGEBRAIC FIELDS; 118. THEORY OF TRANSFORMATION GROUPS (LIE THEORY); 119; 120. DIFFERENTIAL GEOMETRY.

MUSIC

PROFESSOR SPRAGUE

The music curriculum is formulated with the general objective of contributing toward a well-rounded college education. The primary aim of all the offerings of the Department of Music—aesthetic, theoretical, and applied—is to promote a constantly widening acquaintance with the literature of music. The courses all move toward this end: the aesthetic provide a listening survey of comparative epochs and "schools"; the theoretical lead to a more exhaustive and detailed working knowledge, through analysis and composition; the applied, both in individual and ensemble performance, give the creative product its living realization.

Although the purpose of instrumental and vocal instruction is not to make professional musicians but rather to open to the student a broader

grasp of the significance of great music, the University recognizes its obligation to offer those who enter college with some mastery of technique an opportunity to maintain and further advance this acquirement.

3. 4. Music Appreciation.—The masterpieces of music analyzed and interpreted, with a consideration of period tendencies and historical positions of composers. The evolution of form from the folk-song through the symphony. Lectures, illustrations, prescribed readings, reports. No prerequisites. *Two hours a week.*

5; 6. Introductory Harmony.—A study of the fundamental structure of music composition, specifically of the conditions under which tones sound together and move in combination. Prerequisite, a knowledge of notation. *Two hours a week.*

7; 8. Advanced Harmony.—Supplementary to Course 5, 6 and a continuation of the more advanced problems of tone combination. Harmonic analysis, including a brief survey of modernistic tendencies. Given in 1939-40 and alternate years. *Two hours a week.*

9; 10. Counterpoint.—The art of combining melodies, a correlative with Harmony as the material of composition. Analysis of masterworks. Composition projects. Prerequisite, Course 5, 6. Given in 1938-39 and alternate years. *Two hours a week.*

11. 12. Music in the Nineteenth Century.—Romanticism in musical art, particularly as reflected in the symphonic poem and Wagnerian music drama. Analysis of masterworks. Prescribed readings and reports. No prerequisite. Given in 1939-40 and alternate years. *Two hours a week.*

13. 14. Orchestration.—A study of the modern symphony orchestra. Analysis of representative works through score-reading, phonographic records, and attendance at concerts. Assigned readings in history and theory. Practical scoring. An assurance of essential preparation is required. Given in 1938-39 and alternate years. *Two hours a week.*

25. 26. Chorus.—The study and performance of representative choral repertoire, with a consideration of the composers' historical positions and creative aims. An assurance of vocal aptitude is required. *Two hours a week. One hour credit.*

27. 28. Orchestra.—A program in orchestral ensemble, generally of symphonic order, similar to that of Course 25, 26. An assurance of instrumental aptitude is required. *Two hours a week. One hour credit.*

51. Interpretation and Conducting.—A consideration of the problems of organization, time-beating, program-building, and interpretation in

both choral and instrumental ensemble. Prerequisite, an assurance of aptitude and membership in the University band, chorus, or orchestra. *One hour a week.*

BAND is listed under Military Science and Tactics, Course 11. 12.

Applied Courses

The University provides applied music instruction through an affiliation with the Northern Conservatory of Music in Bangor. For economy and convenience to the student, instruction in these courses is given on the campus if a sufficient number register for a course.

A maximum of eight semester hours of credit is allowed for applied music. Repetition of these courses is therefore permitted, with the requisite variation and progress in technical and literary material; but whatever number of hours is credited must be paralleled by at least an equal number of hours in music theory and aesthetics. The University endeavors to provide adequate practice opportunity for students who desire to take applied courses without credit.

VIOLIN, PIANO, ORGAN, VOICE.—Private lessons at periods to be arranged. One hour lesson weekly, $45.00 the semester. *Two credit hours.* One-half hour lesson weekly, $22.50 the semester. *One credit hour.*

INSTRUMENTAL AND VOCAL ENSEMBLE.—Group lessons at periods to be arranged. One hour lesson weekly. Fee, duet, $22.50 per person the semester; trio, $15.00 per person the semester; quartet, $11.25 per person the semester. *One credit hour* in each case.

To meet further demands, instruction in the various orchestral instruments can be provided on a similar basis.

The practice requirements are two hours daily for six days each week for hour lessons, one hour for half-hour lessons. The semester is fifteen weeks for applied music study. Practice facilities are provided on the campus.

For the use of the University instruments, practice fees are charged as follows for a daily practice hour: piano, $2.50 a semester; organ, $5.00 a semester.

PHILOSOPHY

PROFESSOR LEVINSON

Philosophy is the systematic attempt to think our way to the solution of the problems that arise when we ask such general questions as those con-

cerning the meaning of the world, the origin and destiny of human life, its standards and values, the sources and limits of our genuine knowledge, the principles that underlie valid reasoning, and the sources and significance of the sense of beauty. While philosophy is ordinarily approached directly by way of the history of man's attempt to solve these problems (see Pl 3, 4), or through a study of the principal problems or types of philosophy (see Pl 5, 6), opportunity is offered to various classes of students to approach it from the standpoint of their work in other fields (see Pl 11, 12).

3; 4. Historical Introduction to Philosophy.—An approach to philosophy through a first-hand acquaintance with its literature. Reading and interpretation of selections from the philosophical classics of the western world, from Plato to William James. Given in 1939-40 and alternate years. *Three hours a week.*

5; 6. Personal Philosophy.—The student is invited to make a provisional statement of his more general beliefs about the nature of the world and man, and, in the light of assigned readings and class discussions, to formulate a working philosophy of life. Given in 1938-39 and alternate years. *Three hours a week.*

8. The Technique of Thinking.—Exercise in the logical analysis of argument and in the discrimination of "straight" from "crooked" thought. The materials employed in the course are drawn largely from the press and from the literature of the social sciences. *Two hours a week.*

9; 10. Ethics.—A critical examination of various competing conceptions of the good life. Special attention will be given to problems of contemporary society: professional and business ethics; democracy and its rivals; religion. *Three hours a week.*

11. 12. Topics in Philosophy.—This course is restricted to a limited number of properly qualified upperclassmen whose needs in philosophy are not satisfied by any of the other courses offered by the Department. Topics associated with the student's major subject will be studied through tutorial conferences, assigned readings, and reports. No work in philosophy is prerequisite. *Two or three hours a week.*

101. 102. Seminar.—An individually arranged program of tutorial instruction for students offering twelve hours of work in the Department, or the equivalent.

PHYSICS

Associate Professor Bennett (Acting Department Head); Professor Fitch*; Associate Professor Crofutt; Assistant Professor Larsen; Dr. Williams; Mr. Blackmer; Mr. Oleson

Physics is that science which is concerned with the general laws and principles by which the phenomena of the physical world may be rationally understood. It comprises a body of knowledge which is highly organized by the use of mathematical language and precisely defined terms.

The various branches of this broad subject are unified by an abstract concept called energy, whose various manifestations and transformations become the general concern of the student in this field of learning, from both a theoretical and an experimental point of view.

The science serves as the basis for all branches of engineering and is applied to numerous other phases of everyday life, but applications can never wholly absorb or displace those underlying facts and theories on which they depend. Physicists are being absorbed in increasing numbers in industry as well as in the government bureaus and privately endowed research foundations. Trained physicists also find their places today in the larger hospitals where X-ray, radiation therapy, and allied techniques are of the utmost value. In brief, the physicist is rapidly acquiring recognition in our highly scientific modern world in much the same manner as the chemist has done in the last few decades.

To the person who wishes to apply the subject in any of the above ways, or who wishes to teach in the university or the secondary school, a basic training in the subject is the first requirement. Such training is offered by the general and intermediate courses Ps 1a, 2a, or 1b, 2b, and (17, 18; 19, 20) or (21, 22, 24). These courses should be supplemented by a balanced program of mathematics and chemistry. Following this basic training, a suitable number of the more advanced courses in physics is offered by the Department to prepare a student for minor positions in the profession, or to prepare him for the graduate training necessary for the higher positions.

For the intelligent layman who does not wish to be without at least a superficial knowledge of the physical world in which he lives, courses of the more descriptive variety are also offered (Ps 3, Ps 10).

The science requirement of the College of Arts and Sciences is met by Ps 1a, 2a, or Ps 1b, 2b, and partially met by Ps 3.

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*On leave of absence, 1938-39.

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101. 102. Seminar.—An individually arranged program of tutorial instruction for students offering twelve hours of work in the Department, or the equivalent.

PHYSICS

Associate Professor Bennett (Acting Department Head); Professor Fitch*; Associate Professor Crofutt; Assistant Professor Larsen; Dr. Williams; Mr. Blackmer; Mr. Oleson

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The science serves as the basis for all branches of engineering and is applied to numerous other phases of everyday life, but applications can never wholly absorb or displace those underlying facts and theories on which they depend. Physicists are being absorbed in increasing numbers in industry as well as in the government bureaus and privately endowed research foundations. Trained physicists also find their places today in the larger hospitals where X-ray, radiation therapy, and allied techniques are of the utmost value. In brief, the physicist is rapidly acquiring recognition in our highly scientific modern world in much the same manner as the chemist has done in the last few decades.

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For the intelligent layman who does not wish to be without at least a superficial knowledge of the physical world in which he lives, courses of the more descriptive variety are also offered (Ps 3, Ps 10).

The science requirement of the College of Arts and Sciences is met by Ps 1a, 2a, or Ps 1b, 2b, and partially met by Ps 3.

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*On leave of absence, 1938-39.

1a; 2a. General Physics.—This course covers the field of First-Year General College Physics. It is intended for the general student and will satisfy the science requirement in the College of Arts and Sciences, as well as the premedical and predental requirements. Emphasis is placed upon the fundamental relations in mechanics, sound, heat, electricity, magnetism, and light. *Two lectures; one recitation,* and *one two-hour laboratory period a week. Four credit hours.* Mr. Bennett, Mr. Larsen, Mr. Williams

1b; 2b. General Physics.—This is a course in First-Year General College Physics which meets the requirements of the College of Technology. The lectures in this course are held jointly with Course 1a, 2a.
With the extra recitation per week, however, this course places more emphasis on the solution of problems than does 1a, 2a. A knowledge of algebra and geometry is prerequisite. *Two lectures, two recitations,* and *one two-hour laboratory period a week. Five credit hours.*

Mr. Bennett, Mr. Crofutt, Mr. Larsen, Mr. Williams, Mr. Blackmer, Mr. Oleson

3. Descriptive Physics.—A course intended to fill the need of the non-science student who feels that his orientation in the modern world cannot be complete without a contact with physical science. It treats in non-mathematical language and by classroom demonstrations the more important topics in physics with emphasis upon the vocabulary of the science and the proper relationships between the concepts. References are made to the lives and theories of those men who have contributed most to the advancement of physics. The course partially satisfies the science requirement in the College of Arts and Sciences. No previous knowledge of physics is assumed. *Three lectures a week with demonstrations. Three credit hours.* Mr. Bennett

10. Meteorology.—A study of the earth's atmosphere, its composition and movements. Attention is given to atmospheric conditions accompanying changes in weather, a knowledge of which is essential for making weather predictions. The modern aspects of meteorology are also considered. *Three hours a week. Three credit hours.* Mr. Crofutt

17. 18. Intermediate Physics.—This course follows 1a, 2a or 1b, 2b to complete a two-year program in general college physics. A more mathematical treatment of many of the topics already introduced in the first course is presented. This two-year program provides adequate preparation for advanced work in physics or for secondary-school science teaching, and at the same time provides a suitable course for a science or mathematics major. Course 19, 20 is recommended as a companion course. Course 1a, 2a, or 1b, 2b is prerequisite. *Three hours a week. Three credit hours.*

Mr. Bennett

19. 20. Intermediate Laboratory Physics.—A laboratory course intended to supplement Course 17, 18. The experiments are selected from those regularly performed in Courses 21, 24, with the addition of a few experiments in sound and light. Course 17, 18 is required concurrently or as a prerequisite. *Two hours a week. One credit hour.*

Mr. Larsen, Mr. Crofutt

21 (22). Mechanics and Heat Laboratory.—A laboratory course on the intermediate level designed primarily to meet the needs of the College of Technology. Fundamental problems in equilibrium, linear and rotary dynamics, vibratory motion, elasticity, viscosity, thermometry, pyrometry, heat of combustion, thermal conductivity, and elementary thermodynamics are studied from the experimental viewpoint. Course 1a, 2a or 1b, 2b is prerequisite. *Four hours a week. Two credit hours.* Mr. Larsen, Mr. Williams

24. Electrical Measurements.—An intermediate laboratory course designed primarily to meet the needs of the College of Technology, covering theories and practices in the measurement of electrical and magnetic quantities. It includes a study of current, resistance, difference of potential, capacitance, magnetic flux, self and mutual inductances, impedance, vacuum tube characteristics, and frequency of alternating currents. Open to those who have completed Course 1a, 2a, or 1b, 2b, and who have a working knowledge of calculus. Laboratory, *four hours a week. Two credit hours.*

Mr. Crofutt, Mr. Larsen

31. Photography.—This course deals with fundamental theories and techniques and should be of practical value to those considering any line of activity which involves photography. It should also be of interest to those who pursue photography as a hobby or as a form of artistic expression. The work includes: construction and use of various types of cameras; lenses; exposure and exposure meters; emulsions; filters; artificial lighting and copying; contact and projection printing; dark-room practice. *Two lectures and one two-hour laboratory period a week. Three credit hours.* Mr. Crofutt

55. Electricity and Magnetism.—A course on the advanced level covering the fundamental aspects of electrostatics, magnetism, electromagnetic phenomena, direct and alternating currents. Course 17, 18, or its equivalent and a working knowledge of mathematics through the calculus are required. *Three hours a week. Three credit hours.* Mr. Larsen

57. Mathematical Physics.—An advanced course in selected theoretical aspects of physics. Mathematical methods are applied to physical principles. Open to students who have completed Course 17, 18 or its equivalent and who have a working knowledge of the calculus. Offered in alternate years. *Three hours a week. Three credit hours.* Mr. Williams

60. Sound.—A course dealing with vibrating systems, sources of sound, transmission of sound, its reception and transformations. Attention is given to speech and hearing, sound ranging, architectural acoustics, reproduction of sound, noise reduction, and musical instruments. Open to those who have completed Course 17, 18 or its equivalent, and have a working knowledge of the calculus. *Three hours a week. Three credit hours.* Mr. Crofutt

62. Heat and Thermodynamics.—An advanced course dealing with the measurement of temperature, specific heat, thermal expansion, conduction, convection, radiation, change of state, and the laws of thermodynamics. Open to students who have completed Course 17, 18 or its equivalent and who have a working knowledge of the calculus. Offered in 1938-39 and alternate years. *Three hours a week. Three credit hours.* Mr. Larsen

66. Vacuum Tubes and Thermionic Phenomena.—This is a course covering thermionic emission and electronic phenomena in vacuum. In addition to a theoretical treatment of the subject, the physics of vacuum tubes as rectifiers, amplifiers, modulators, and detectors is treated in a practical manner. Open to advanced students who are familiar with the calculus and who have completed Course 17, 18 or its equivalent. Offered in 1939-40 and alternate years. *Three hours a week. Three credit hours.* Mr. Larsen

68. Modern Physical Theories.—An advanced course embracing a study of electrical phenomena in gases, spectra, X-rays, photo-electric effects, radioactivity, atomic structure, electrical phenomena in solids, and nuclear physics. Some attention is given to quantum and wave mechanics. Open to students who have completed Course 17, 18 or its equivalent and can use the calculus. *Three hours a week. Three credit hours.* Mr. Williams

73. Light.—An advanced course in the study of light covering its velocity of propagation, reflection, refraction, diffraction, interference, and polarization. It also includes a study of optical instruments. Open to advanced students who can use the calculus and have credit for 17, 18 or its equivalent. *Three hours a week. Three credit hours.* Mr. Bennett

81. 82. Advanced Laboratory Physics.—In this course selected advanced experiments are performed by the student under the supervision of some member of the staff. Opportunity is also given to develop original ideas and to construct original apparatus as part of senior thesis work. Courses 19, 20, or 21, (22) and 24 are prerequisite. Credits arranged.

Members of the Departmental Staff

97. 98. Physics Seminar.—Topics recently considered include Quantum Mechanics, Statistical Mechanics, and Nuclear Physics. *Credit arranged.* Members of the Departmental Staff

101. 102. Special Laboratory.—An original investigation, open only to graduate students. It is not expected in this course that a student will confine his work to a minimum number of hours a week. *Credits arranged.*

Members of the Departmental Staff

PSYCHOLOGY

Professor Dickinson; Associate Professor E. N. Brush; Dr. Glanville; Dr. White; Dr. L. H. Brush

Psychology includes a study of mind and of modes of behavior. It offers the student an opportunity to acquaint himself at first hand with the fundamental laws of the psychophysical organism. Through a study of the child, the normal adult, and the abnormal individual, it enables him to gain an insight into personality development and the problems of human adjustment. Through experience with psychological tests and the techniques of testing he comes to a more practical understanding of intelligence.

In its ramifications psychology borders upon the natural as well as the social sciences. It is most closely allied, however, with education, zoology, economics, sociology, and philosophy.

The Department of Psychology offers a counseling service for students in the College of Arts and Sciences.

Some of the occupations which courses offered in the department lead toward are: advertising and selling, clinical psychology, personnel work in business and industry, psychiatric and general social work.

Students may combine a major in Psychology with any other of the Social Sciences; Economics, Government, History, Philosophy, Sociology, or with Education or Zoology.

Psychology 0. The Technique of Effective Reading.—An analysis of the individual student's reading habits is followed by an intensive program of training designed to increase efficiency in reading. Limited to twenty-five students. *Elective. No credit. Two laboratory periods a week.*

Mr. White

1; 2. General Psychology.—A basic course designed to give a general introduction to the field of psychology and to relate its subject matter to everyday life. A systematic survey of such topics as learning and memory, thinking, imagination, intelligence, personality, motivation, observation, the development and the physiological basis of behavior; a brief discussion of some of the special fields of psychology, e.g., applied, child, social, abnormal.

A weekly laboratory period. Classroom, *two hours a week;* laboratory, *two hours a week. Three credit hours.* THE DEPARTMENTAL STAFF

3. APPLIED PSYCHOLOGY.—Psychology applied to industry, business, advertising, salesmanship, and other fields. The application of psychological methods and tests in the selection and training of workers. Open only to Technology students in Mechanical Engineering. *Three hours a week.*

MR. BRUSH

12. ADVERTISING AND SELLING.—A course designed to acquaint the student with the psychological principles involved in advertising and selling. Practical application of these principles in rewriting advertisements appearing in newspapers and magazines, and in the developing of an advertising and selling campaign in relation to an actual product. Prerequisite, Course 1, or permission of the instructor. *Three hours a week.* MR. DICKINSON

66. EDUCATIONAL PSYCHOLOGY.—The application of psychological facts, principles, and points of view to education. Consideration of growth during the school years, with attention to social, emotional and intellectual development. Learning in schools; its nature and control, its permanence and effects on attitudes, interests and appreciations; the problem of transfer of training. Prerequisite, Course 1, 2. *Three hours a week.* MR. WHITE

67. PSYCHOLOGY OF CHILDHOOD.—A study of the mental growth of the child to twelve years of age. Native equipment, environmental influences, the development of motor and behavior patterns, speech, inference, judgment, etc., are given consideration. Modern experimental techniques of child study are discussed. Five thousand feet of motion pictures are available. Prerequisite, Course 1, 2, with a grade of C or better. *Three hours a week.*

MR. DICKINSON

68. PSYCHOLOGY OF ADOLESCENCE.—A study of the physical and mental changes which occur at this period. Learning, memory and reasoning, emotional maturing, personality development and disturbances of personality are among the items considered. Prerequisite, Course 1, 2. *Two hours a week.*

MR. BRUSH

69; 70. EXPERIMENTAL PSYCHOLOGY.—The first semester aims to acquaint the student with methods in the qualitative study of experimental problems and orient him in the objective approach to problems. In the second semester emphasis is placed upon quantitative methods and the statistical treatment of data. For psychology majors and other interested and qualified persons. Prerequisite, Course 1, 2. *Three hours a week.* MR. GLANVILLE

71. 72. ABNORMAL PSYCHOLOGY AND MENTAL HYGIENE.—A study of mental abnormalities followed by a study of the normal mentality, with a

view to a better understanding of educational practice and the problems of human adjustment. Through the coöperation of Dr. C. J. Hedin, superintendent, five clinics are conducted at the Bangor State Hospital on the following Tuesday afternoons from two until four o'clock: October 18, November 1, 15, 29, December 6. Attendance at the clinics is required. Prerequisite, Course 1, 2, with a grade of C or better. *Three hours a week.*

Mr. Dickinson

75. Social Psychology.—The development of social behavior in the individual; personality in its relation to the social environment; social attitudes; forms of social interaction; the psychological basis of propaganda, crowd behavior and other forms of group activity. Prerequisite, Course 1, 2. *Three hours a week.* Mr. Brush

81; 82. Mental Measurement.—Training in the use of psychometric methods, with opportunity for their application to practical or research problems. During the first semester the emphasis is upon technical training, during the second upon the application to problems. Primarily for seniors and graduate students who plan to enter the teaching profession, social service, or personnel work. Prerequisite, Course 1, 2. *Three hours a week.*

Mr. Brush, Mr. Glanville

91. 92. Problems in Psychology.—Primarily for graduate students and seniors with a rank of B or better. The self-active student has here an opportunity to select and attack particular psychological problems with the benefit of criticism and suggestions from the instructor at stated intervals. Admission by consent of the instructor. *Hours arranged.*

Mr. Dickinson and Staff

93. 94. Seminar in Psychology.—Advanced work for graduate students, psychology majors, and other interested and qualified persons. In successive semesters the subject matter includes history of psychology; systems and schools of psychology; current psychological experimental literature; etc. Required of all Psychology majors; prerequisite for others, permission of the instructor. *Two hours a week.* Mr. Dickinson

PUBLIC SPEAKING

*Professor Bailey; Assistant Professors Bricker and Runion; Mr. Dusenbury; Mr. Miller

Courses in speech are a great aid both to the professional and non-professional man. The teacher, lawyer or minister can hardly dispense with a

*On leave of absence, 1938-39.

knowledge of how to construct and effectively deliver a speech. Business people find a knowledge of public speaking an aid to them whether they are executives or salesmen. In a word, to be a good speaker is a great help towards leadership in any chosen field.

Drama, on the other hand, while teaching students many of the very essential necessities of voice, posture, ease, and diction, creates a love for the beautiful, and develops an appreciation of one of our greatest arts. No more interesting or cultural employment of leisure time perhaps can be suggested than becoming associated with the drama as playwright, producer, actor, scenic designer, or lighting technician. A full enjoyment of dramatic art demands a knowledge of the technical principles upon which it is founded.

Students interested in public speaking as a practical art may major in Speech; those interested in public speaking as a fine art may major in Drama.

Students who major in Speech are expected to write and deliver a forty-minute address before some civic organization.

Students who major in Drama must either give a recital of approved standard, or direct, or take a major role in, a dramatic production.

Courses in Public Speaking

1 (2). PUBLIC SPEAKING.—A basic course in public speaking. The student is taught to organize material and to deliver short extemporaneous speeches. Each student is required to have a recording made of his speech. *Two hours a week.*

MR. BRICKER, MR. RUNION, MR. DUSENBURY, MR. MILLER

3 (4). DEBATING.—Questions of state, national, and international importance are debated in class. Students expecting to do advanced work in debating are advised to take this course as early in their college career as possible. *Two hours a week.* MR. RUNION

6. PERSUASIVE SPEECH.—Course 6 is a continuation of Course 1. The object of the course is to train students to organize their material persuasively, to continue extemporaneous speaking, to give the student practice in organizing and delivering oral reports, and to train the student in the principles of effective conference speaking. Prerequisite, Course 1 (2). *Two hours a week.* MR. BRICKER, MR. RUNION, MR. DUSENBURY, MR. MILLER

7 (8). INTERPRETIVE READING.—The oral interpretation of many selections from English prose, poetry, and drama forms the basis of this course. Several selections are rendered from memory, and exercises in the use of the voice are included. This course is recommended especially to the teacher of English. *Two hours a week.* MR. RUNION

12. Parliamentary Law.—A course stressing principles of Parliamentary procedure and methods of conducting a meeting. The class organizes as a Parliamentary Society, constructing and adopting a constitution and by-laws. Each student will have an opportunity to preside. No prerequisite. *One hour a week.* Mr. Runion

19. 20. Advanced Debating.—A course designed to meet the need of the student who desires advanced work in debate, or who wishes to direct or teach debating, or take part in intercollegiate debate. An individual program is worked out for each student enrolled. Prerequisite, four hours in speech courses or permission of the instructor. *One hour a week.* Mr. Runion

21. 22. Radio Speaking.—A consideration of speech and dramatic programs suited for radio speaking: debate, interpretative reading, and the radio play. Special attention will be given to program building: news, sports, and feature writing. Qualities necessary for good radio announcing, with emphasis on voice, diction, enunciation, and pronunciation. Opportunities may be given to appear on radio programs. *Two hours a week.* Mr. Dusenbury

0. Speech Correction.—Open to students with speech defects. The method of instruction is largely individual. *No credit.* Mr. Runion

47. Speech Pathology.—A course designed to acquaint the student with symptoms, causes, and treatments of disorders of speech and voice. Stuttering, articulatory defects, aphasia, and voice disorders are included. *Two hours a week.* Mr. Runion

48. Vocal Development.—The aims of this course are to improve the voice and to give training in distinguishing correct and defective sounds. The approach is by breathing and vocal exercises and nonsense dictation tests (the phonetic symbols of the International Phonetic Association are used). Prerequisite, Course 1 (2) or 7 (8). *Two hours a week.* Mr. Runion

49. Theory of Speech Composition.—Historical and critical survey of rhetorical theory from Aristotle to the present time with particular attention to Aristotle, Cicero, and Quintilian. Open to juniors and seniors. *Two hours a week.* Mr. Runion

50. Teaching of Speech.—Consideration of teaching problems and technique with special emphasis on the speech program in the secondary schools. Supervision of extra-curricular activities in speech. Study of textbooks. Open to juniors and seniors or by permission of instructor. *Two hours a week.* Mr. Runion

Courses in Theatre

9 (10). THEATRE APPRECIATION.—A lecture course for students wishing to cultivate an appreciation for the present-day theatre. Topics presented: dramatic theory and criticism, problems of our theatre today, drama books and magazines, actors, scene designers, directors, producers, playwrights, etc. Open to all University students. An elementary course for drama majors. *Two credit hours.* MR. BRICKER

15 (16). ELEMENTARY ACTING.—A course designed to emphasize the fundamentals in theory and in practice. Lectures and classroom exercises. Public recitals for students who have attained a degree of technique. *Three hours a week. Two credit hours.* MR. BRICKER

17 (18). STAGECRAFT.—Practical experience in building and painting scenery, and in scene designing and lighting. *Three hours a week. Two credit hours.* MR. MILLER

29. SCENE DESIGNING AND LIGHTING.—The artistic principles of scene designing and lighting. Lectures and exercises. Prerequisite, Course 17 (18). *Two credit hours.* MR. BRICKER

30. ADVANCED ACTING.—A study of acting technique. An opportunity to study several roles during the year. Public recitals. Prerequisite, Course 15 (16). *Three hours a week. Two credit hours.* MR. BRICKER

32. COSTUME.—Costume designing for definite play characters. Conference and laboratory. Prerequisite, Course 29. Not offered in 1939-40. *Two credit hours.* MR. BRICKER

35. MAKE-UP.—Practice in making up all types of characters. *Two hours a week. One credit hours.* MR. BRICKER

37, 38, a-f. THEATRE PROJECTS.—Advanced work in one or more of the following divisions of the theatre: acting, designing, costuming, lighting, directing, and make-up. Admitted by permission. Not offered in fall semester, 1939. *Two credit hours.* MR. BRICKER, MR. MILLER

37a, 38a. ACTING.
37b, 38b. DESIGNING.
37c, 38c. COSTUMING.
37d, 38d. LIGHTING.
37e, 38e. DIRECTING.
37f, 38f. MAKE-UP.

Students are not permitted to take more than four hours of work in this course.

39-40. Stage Directing.—A course giving the student, both in theory and practice, the principles of stage directing. Admitted by permission. Not offered in 1939-40. *Two credit hours.* Mr. Bricker

RELIGION

Mr. Beverage

1. 2. A Survey of Old Testament History and Literature.—A course intended to enable students to understand the great moral, ethical, and religious heritage of ancient Hebrew civilization. Lectures, discussions, and supplementary readings are designed to furnish a comprehensive view of the economic, geographic, historical, and sociological forces which produced the great achievements of the Old Testament records. *Three hours a week. Three credit hours.*

3. 4. Religion and Modern Life.—A study of the essential nature and function of religion in contemporary society, based upon an historical survey of the origin and development of the religious consciousness. Assigned readings will supplement lectures and discussions directed towards the development of students' ability and desire to evaluate for themselves both the theoretical and practical application of our great religious tradition. *Two hours a week. Two credit hours.*

ROMANCE LANGUAGES

Professor Peterson; Assistant Professors Arnold,* Buzzell, and Vigneras; Dr. Starr; Miss Franck (Exchange student)

The Department of Romance Languages offers in its French courses the opportunity to perfect one's self in writing and speaking the language. The more elementary courses provide primarily practice in reading; in subsequent years the structure and development of the language are set forth in the linguistic courses, while the customs and manners of the people are discussed in the classes in conversation. The chief literary works are carefully read and interpreted, and the student is encouraged to develop independence of critical judgment. The student is thus given an opportunity through first-hand acquaintance with the language and literature of a people to establish direct relationship with its culture.

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*On leave of absence, 1938-39.

A more limited range of courses is available in Spanish, but their aim, so far as time permits, is the same as that of the work in French.

Students concentrating in French are required to elect a minimum of 22 hours in the junior and senior years. Courses 21, 22; 27, 28; 29, 30 may not be included in this number, being intended primarily for sophomores. Twelve of the 22 hours must be in literature. Major students are advised to secure some familiarity with another Romance language or to continue Latin.

Students may also concentrate in the general field of Romance Languages, electing, in the junior and senior years, a total of 22 hours of suitable courses in French and Spanish.

Students not concentrating in Romance Languages but expecting to teach them will be recommended for the teacher's certificate if they elect one year-course in literature and two year-courses in oral French. This same basic program is recommended also for those who take French with a view to diplomatic and consular service or positions in the foreign department of city banks or foreign posts in other industries. The oral work especially is suggested for those interested in art and music, secretarial work, and department store buying.

French

BASIC COURSES

These courses, intended for freshmen, are designed to teach the student to read at sight the French of representative authors. The material is chosen from outstanding writers of the modern period.

3; 4. Intermediate French.—Reading of narratives, with grammar review. Attention to pronunciation and exactness of translation. For students offering two units of French as an entrance requirement and for those offering three units whose preparation is inadequate for Course 5. 6. In the latter case only two hours of credit are allowed. *Four hours a week.*

Miss Buzzell, Mr. Vigneras

5. 6. Advanced French.—Reading of novels and short stories, some intensively, others more rapidly, to secure facility in the comprehension of present-day French prose. Study of idioms and word usage. Accuracy in translation is stressed. Open to students offering three units of French as an entrance requirement and to exceptional students offering two units. *Three hours a week.* Mr. Peterson, Mr. Vigneras, Miss Buzzell

GENERAL LANGUAGE AND LITERATURE COURSES

7. 8. Elementary Conversation and Composition.—Grammar review and constant drill in spoken French to acquire a practical vocabulary and achieve correct speech. Open to students who have offered three units of French for entrance or who have completed Course 3, 4. *Two hours a week.* Mr. Peterson

8a. Elementary Conversation and Composition.—An intensive second-semester course covering the same material as Course 7, 8. Open to students whose previous record in the subject is above the average. *Two hours a week.* Mr. Peterson, Mr. Starr

9. 10 Advanced Conversation and Composition.—The aim of the course is to enable the student, through discussion of the customs and interests of every-day French life, to express himself readily in colloquial French. One hour a week will be devoted to a survey of French civilization. Required of all majors and students planning to teach French. *Three hours a week.* Mr. Vigneras, Miss Franck

9a. 10a. Advanced Conversation and Composition.—Same as Course 9, 10, but without the survey of French civilization. *Two hours a week.* Mr. Vigneras, Miss Franck

Course 5, 6 or the equivalent is a prerequisite for all courses listed below, Students who have not passed a reading test should register for Course 17, 18. Those who have passed a reading test may elect either Course 21, 22 or 29, 30 (27, 28), one of which is a prerequisite for courses in literature numbered above 40.

17. 18. Rapid Reading Course.—A continuation of Course 5. 6 designed to promote facility in reading for those who have not passed a reading test. *Three hours a week.* Miss Buzzell

21. 22. The Novel in the Nineteenth Century.—A study of the renewal of French literary inspiration by Chateaubriand and Victor Hugo and the development of the realistic novel by Balzac, Flaubert, and others. Reading of examples of both Romantic and Realistic fiction. *Three hours a week.* Miss Buzzell, Mr. Starr

27. 28. Social and Political Trends.—The reading of modern writers dealing with trends and problems in economics, government, and other social sciences and the background of modern society. Collateral reading by the student in the field of his special interest. Offered in alternate years; not offered in 1939-40. *Three hours a week.* Mr. Vigneras

29. 30. Contemporary Literature.—Similar in scope to Course 27. 28 but with more attention to the novel and drama. A brief review of literary trends from 1880 to the World War, followed by an intensive study of the post-war period with emphasis upon economic, social, and political influences. Alternates with Course 27, 28; offered in 1939-40. *Three hours a week.*

Mr. Vigneras

MORE ADVANCED COURSES

The following courses are conducted mainly in French

45. 46. The Theatre in the Nineteenth Century.—A study of the great dramatists of modern France with introductory lectures on the development of the theatre. Reading of plays of the Romantic and Realistic schools. An effort is made to develop independent criticism of style and technique. Alternates with Course 63, 64; offered in 1939-40. *Three hours a week.*

Mr. Peterson

51. 52. Survey of French Literature.—A study of the growth of French literature from the Middle Ages to the present day, with emphasis upon the important literary movements. Reading of selections, especially those representing literary forms and periods not covered in other courses. Offered in alternate years; not offered in 1939-40. *Three hours a week.*

Mr. Vigneras

57. 58. French for Prospective Teachers.—In the first semester, through a review of the fundamentals of grammar, the student is taught to recognize and explain common difficulties confronting the teacher in the secondary school. The second semester is devoted to a discussion of methods and problems of instruction along with a further study of the language. Prerequisite, Course 9. 10. Alternates with Course 51, 52; given in 1939-40. *Three hours a week.* Mr. Vigneras

63. 64. French Classical Literature.—A study of the leading characteristics of the seventeenth and eighteenth centuries. Reading of masterpieces of the classical dramatists, La Fontaine, Voltaire, Montesquieu, and other writers. Prerequisite, Course 45. 46. Offered in alternate years; not offered in 1939-40. *Three hours a week.* Mr. Peterson

Spanish

1-2. Elementary Spanish.—A course for beginners, which includes a study of the basic principles of Spanish grammar, pronunciation exercises, dictation, oral practice, and composition, with especial attention to the mastery

of verb forms and pronouns. Reading is begun at an early date, and emphasis is laid upon the acquirement of an adequate vocabulary. *Four hours a week.*
MR. PETERSON

1a-2a; 2b. ELEMENTARY SPANISH.—Similar in content to Course 1, 2 but extends through three semesters and includes a larger amount of reading. The class begins in the second semester and is continued through the following year. *Three hours a week.* MR. STARR

3. 4. MODERN SPANISH PROSE.—The principal aim of this course is to secure facility in the reading and comprehension of ordinary Spanish prose of the modern period. Certain books—novels, short stories, and plays—are studied intensively while others are read more rapidly. Review of grammar, study of idioms, and oral practice. Designed for second-year students. *Three hours a week.* MR. STARR

5. 6. ELEMENTARY CONVERSATION AND COMPOSITION.—Stress is laid upon the acquisition of a practical vocabulary by means of exercises based upon Spanish newspapers. Study of the grammar and translation into Spanish. Designed for third-year students or for second-year students who are pursuing at the same time Course 3, 4. *Two hours a week.* MR. STARR

7. COMMERCIAL SPANISH.—The object of this course is to acquaint the student with the forms of private and commercial correspondence and the vocabulary used in the business world. Reading of selections dealing with industrial and commercial life. Given occasionally. *Three hours a week.*
MR. STARR

9. 10. RAPID READING COURSE.—A continuation of Course 3. 4 designed especially to promote facility in reading. The material read, consisting largely of narratives, will be limited to the modern period. *Two hours a week.*
MR. STARR

57. 58. SURVEY OF SPANISH LITERATURE.—A study of the development of the various literary forms in Spain and the reading of selections from representative authors of various periods. Some attention is given to Spanish-American writers. Given in alternate years. *Three hours a week.*

The following course may be given for special reasons: 51. 52. THE NOVEL AND DRAMA.

SOCIAL SCIENCE

MR. KIRSHEN; MR. MCREYNOLDS

1; 2. SOCIAL SCIENCE.—A study of significant social problems of contemporary society. This course has three primary objectives for the student:

to understand contemporary society; to relate the present scene to its historical background; and to develop a method of critical analysis. Open to Arts and Sciences freshmen. *Three hours a week.*

1b; 2b. Social Science.—Same as 1; 2. Open only to Home Economics students. *Three hours a week.*

3, 4. Social Science.—A continuation of 1; 2. Open to Arts and Sciences sophomores. *Three hours a week.*

ZOOLOGY

Professor Murray; Assistant Professors Nelson and Speicher; Dr. Cooper; Dr. Fuller; Miss Durick; Miss Mansfield; Mr. Kroll; Mr. Ellis

Zoology is the branch of biological science which deals with the study of animal life. A knowledge of the general principles of zoology is prerequisite to an understanding of the relationships which exist between man and his natural environment, and serves as a basis for the study of the mental and social side of human behavior.

The Department offers curricula satisfying the requirements for admission to graduate, medical, dental, and nursing schools.

1. General Zoology.—A one-semester course in the fundamentals of zoology, illustrated by laboratory study of typical forms from the various groups of the animal kingdom. This course is designed to meet the requirements of students in the College of Agriculture. Together with Botany 2 it may be taken to fulfill the natural science requirement in the College of Arts and Sciences. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Murray and Assistants

3; 4. Animal Biology.—A two-semester course in the fundamental principles of animal life, with laboratory study of the structure and function of organ systems in typical forms from the various groups of the animal kingdom. This course is prerequisite to all advanced courses in the Department and fulfills the natural science requirement in the College of Arts and Sciences. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Murray, Mr. Speicher, and Assistants

9. Ichthyology.—A course which deals with the characteristics of fishes, their life histories and economic importance, with particular emphasis on the fresh-water species. Lectures, supplemented by laboratory study and dissection. Prerequisite, Zoology 1 or 3, 4. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Cooper

10. Ornithology.—A course which deals with the characteristics of birds, their life histories and economic importance, with particular emphasis on game species. Lectures supplemented by laboratory study of skins and mounted specimens, and directed field observation. Prerequisite, Zoology 1 or 3, 4. Classroom, *two hours a week;* laboratory, *four hours a week Four credit hours.* Mr. Cooper

12. Anatomy and Physiology.—A course which takes up the general principles of animal life and the structure and function of organs and organ systems, with special emphasis placed on higher mammalian forms. Designed for students in the Department of Home Economics, but open, by permission of the instructor, to all qualified women students. Classroom, *three hours a week;* laboratory, *four hours a week. Five credit hours.*

Mr. Murray, Mr. Fuller

13. Mammalogy.—A course which deals with the characteristics of mammals, their life histories and economic importance, with particular emphasis on game species. Lectures supplemented by laboratory study and dissection. Prerequisite, Zoology 1 or 3, 4. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Murray

14. Animal Parasitology.—This course deals with the identification of the more important parasites, the study of their life histories, and the prevention, control, and cure of the diseases involved. Special emphasis is given to the parasites affecting game animals. Prerequisite, Zoology 1 or 3, 4. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.* Mr. Nelson

15; 16. Comparative Anatomy.—A comparative study of the structure, origin, and history of the vertebrate organ-systems. Prerequisites, Zoology 1 and Botany 2, or Zoology 3, 4, passed satisfactorily. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.*

Mr. Nelson

18. Vertebrate Embryology.—A study of the development and formation of tissues, organs, and organ-systems in vertebrates. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.*

Mr. Murray

19. Fish Culture.—This course deals with the practical problems involved in the rearing of fish. Prerequisites, Zoology 9 and Entomology 26. First nine weeks of the first semester. Lecture, *one hour a week;* laboratory, *three hours a week. One credit hour.* Mr. Cooper

20. Fish Culture.—Continuation of 19. Lecture, *two hours a week;* laboratory, *three hours a week. Three credit hours.* Mr. Cooper

21. Animal Ecology.—This course deals with the ecology of game animals. Prerequisite, Zoology 10 and 13. First nine weeks of the first semester. Lecture, *two hours a week. One credit hour.* Mr. Cooper

22. Animal Ecology.—Continuation of 21. Lecture, *three hours a week. Three credit hours.* Mr. Cooper

37; 38. General Physiology.—A study of the physico-chemical forces of the vital processes of plants and animals; the more special phenomena in higher animals, with their bearing on human physiology. Prerequisites, two years of chemistry, one year of physics, and either Zoology 3, 4, or Zoology 1 and Botany 2. Classroom, *two hours a week;* laboratory, *four hours a week. Four credit hours.* Mr. Fuller

41. Histology.—A study of animal tissues and of the methods of preparing microscopic slides. Admission by arrangement with the instructor. Prerequisite, two years of zoology. Classroom, *one hour a week;* laboratory, *six hours a week. Three credit hours.* Mr. Speicher

44. Biological Theories.—A discussion of the more important generalizations concerning the biological sciences designed to portray the growth and development of biological knowledge as a phase of intellectual culture, and to indicate the value of such knowledge to human welfare. Open only to zoology majors in the junior and senior years and to others upon the written approval of the instructor. Classroom, *two hours a week. Two credit hours.* Mr. Nelson

47. 48. Problems in Zoology.—Open to juniors and seniors who may have special interest and special qualification in some branch of zoology. The approval of the instructor concerned must be obtained before registering for this work. *Credit, arranged.* Mr. Murray

55. 56. Zoological Seminar.—A consideration of the historical and current literature which expresses the trends of thought in biological science. Required of all senior majors and graduates majoring in zoology. Classroom, *one hour a week. One credit hour.* The Departmental Staff

66s. Marine Invertebrate Zoology. (Given at the University of Maine Biological Laboratory at Lamoine.)—This summer course is intended for students who have had some work in Zoology and who wish to gain first hand acquaintance with living forms. It will consist of lectures and reading to cover the general field of invertebrate zoology from the systematic phylogenetic viewpoint as well as pointing out problems connected with the various groups: laporatory work will give an opportunity to study the anatomy of typical forms and follow out some of the problems discussed in the lectures; field trips will stress the collecting, classification and habitat of local forms.

Usually there will be a lecture every morning followed by a supervised laboratory both morning and afternoon, but two or three times a week there will be field trips and as there is a tide fall of over eleven feet, these trips must be arranged so that the work may be done on the low tide. *Six hours credit.*

MR. REINHARD, MR. SPEICHER, and ASSISTANTS

Opportunity is given for graduate work in the various phases of zoology under the direction of the members of the Department. Students with adequate preparation may register by special written permission for the following courses:

105. 106. PROBLEMS IN ZOOLOGY.

111. 112. PROBLEMS IN PHYSIOLOGY.

School of Education

GENERAL INFORMATION

The School of Education offers professional training to secondary teachers, superintendents, principals, and supervisors. Students will ordinarily enter with Junior standing, having had the first two years of work in either a liberal arts college or a normal school. Those with a different type of training may enter as special students until Junior standing is attained.

ADMISSION

Students in the College of Arts and Sciences

Those students in the College of Arts and Sciences of the University of Maine who plan to teach are given the opportunity to transfer to the School of Education at the beginning of their junior year. Such students should take the regular course as prescribed by the College of Arts and Sciences during the freshman and sophomore years, including in particular the course in General Psychology and such basic courses in other fields as will lay the foundation for a field of concentration.

At the beginning of the sophomore year, such students should register their intention to teach in the office of the Dean of the School of Education, and secure his approval as well as the approval of the Dean of the College of Arts and Sciences for their courses of study.

To be admitted to the School of Education students must have made a grade of C or better in at least three-fourths of their entire work during the freshman and sophomore years.

These students will be candidates for the degree of Bachelor of Arts in Education on the completion of their program in the School of Education.

Normal School Graduates

Students in the normal schools who wish to qualify for the Maine secondary-school teacher's certificate should plan to transfer to the University at the end of their second year at the normal. Such students who rank in the upper half of their class and are recommended by their principal, may be ad-

mitted to the School of Education with full Junior standing, and may graduate on the satisfactory completion of two years of work.

Graduates of the three-year courses in the normal schools, who rank in the upper half of their classes and are recommended by their principal, may be admitted to the School of Education with Senior standing and may graduate on the satisfactory completion of one year of work. This program will not, however, qualify one for the secondary-teacher's certificate.

All normal-school graduates will be expected to meet the requirement of a field of concentration in academic subjects, except that those who plan to enter administrative or supervisory work, or to remain in elementary school work, may be permitted to take this work in Education and Psychology. In either case any work previously taken at the normal school which lies within the field chosen will be given due credit toward the requirements.

Normal-school graduates who are interested in entering the School of Education should request their principal to send a transcript of their record together with a statement giving their class rank to the Director of Admissions of the University. These should be accompanied by a recommendation of the candidate by the principal.

Students who come from the normal schools will ordinarily be candidates for the Bachelor of Science in Education degree.

Graduates of other types of teacher-training institutions will be considered on their merits as special cases.

Commercial Education

An arrangement has been made with the State Department of Education whereby graduates of the teacher-training departments of approved commercial schools may receive appropriate credit toward the degree of Bachelor of Science in Commercial Education. For further information inquiries should be addressed to the office of the School of Education.

GRADUATION REQUIREMENTS

The equivalent of 125 hours of college work is required for graduation. Three-fourths of the work done while a student in the School of Education must be completed with grades of "C" or better.

It is expected that this proportion of "C" grades or better be maintained throughout the student's curriculum in the School of Education.

If, at the completion of 125 hours, the student has failed to maintain this proportion of "C" grades or better, the Dean shall determine whether and

in what manner the deficiency may be made up. In no case may the student take more than six additional hours to satisfy the graduation requirement.

Approximately 24 hours will be required in Education and Psychology, and 40 to 50 hours in the field of concentration, all of which must be carried with a grade of "C" or better.

Professional Subjects Required

Ed 29 (or 30)—Practice Teaching
Ed 49 (or 50)—Seminar in Education
Ed 51, 52, 53, or 54—History of Education
Ed 59—Principles of Secondary Education
Ed 65 (or 66)—Educational Measurement
Ed 77 (or 78)—Principles and Methods of High School Teaching
Py 1, 2—General Psychology
Py 66—Educational Psychology
Special Methods (one such course to be selected in a subject within the field of concentration)

Transfer students should plan to take a minimum of two courses in Education at the University regardless of the amount transferred.

Besides these specific requirements in strictly professional subjects, students will be strongly advised to take general courses in a number of subjects of vital importance as a part of the background of any teacher or educator, such as biology, economics, English, history and government, and sociology.

Field of Concentration

In order better to meet the needs of the typical high-school situation, the traditional requirement of a single major subject will be replaced by that of a field of concentration in the academic subjects. This field of concentration must include a minimum of 40 to 50 semester hours in a group of related subjects commonly taught in the secondary schools, the exact amount to depend on the number and character of the subjects combined, and the quality of the work done. This work must be carried with a grade of C or better to qualify for a degree in Education, and must be acceptable to the heads of the departments in which it is taken.

This requirement applies to all students whether working for the Bachelor of Arts in Education or the Bachelor of Science in Education degree. Those, however, who have had teaching experience and who plan to enter

administrative, supervisory, or elementary-school work may be permitted to carry their field of concentration in Education and Psychology instead of academic subjects.

Combinations of subjects which occur frequently in the secondary schools are as follows: French and Latin; English and History; Mathematics and the Natural Sciences; English and Latin; English and French; History and Latin; English, French, and Latin; English, History, and Latin; English, History, and French; History, Civics, Economics, and Sociology.

Subjects which occur in a large variety of combinations are Physical Education, Music, Debating, and Dramatics. Each student will be expected to take sufficient work to attain proficiency in at least one of these fields.

COMPREHENSIVE EXAMINATION

Seniors in the School of Education will take a comprehensive oral examination in the subject of education, to be given individually by arrangement during the month of May. Non-resident and summer session students will be expected to take the examination as well as regular resident students.

The main purpose of this requirement is to enable students in education to develop a better integration of their professional training and outlook. To facilitate this purpose and to compensate in part for the lack of a tutorial system which usually accompanies a system of comprehensive examinations, a new course, Education 49 (50), is required of students one semester during their senior year.

HONORS COURSE

Attention is called to the tutorial honors course which is open to superior students in education who may desire to supplement their field of concentration by study under individual tutorial guidance. A fuller description of this course is to be found at the beginning of the section on General Courses.

RESIDENCE REQUIREMENT

A minimum of thirty semester hours of credit must be earned while in residence at the University to qualify a candidate for a degree. This requirement may be met by one academic year of residence, or in case of teachers by attendance in summer sessions. Five summer sessions may be accepted as the equivalent of one academic year provided the work is of distinct-

ly high quality. In either case, this requirement must ordinarily be met after the student has become a candidate for a degree in the School of Education.

Exceptions to these rules will not be permitted except by a vote of the faculty.

A maximum of sixteen semester hours may be earned toward a degree by extension work, of which not over eight hours may be taken by correspondence. The amount permitted will be in proportion to the total amount of time spent at the University.

DEGREES

(1) Bachelor of Arts in Education. This degree will be given to students who do the first two years of work in the College of Arts and Sciences, or the equivalent thereof, meet their entrance requirements, and their curricular requirements for the first two years. Candidates for this degree will be required to complete a minimum of 40 to 50 hours in a group of related academic subjects which are commonly taught in the public schools, with a grade of C or better.

(2) Bachelor of Science in Education. This degree will be given to students who are admitted from normal schools with advanced standing. Requirements for the degree will include a field of concentration in the academic subjects as for the B.A. degree, and the same professional courses. In meeting both these requirements, however, due credit will be given for the courses which have been previously taken in the normal-school course.

(3) Bachelor of Science in Commercial Education. This degree has been established for graduates of approved teacher-training departments of commercial schools in Maine, who transfer to the School of Education on the completion of their course and complete the course approved for this degree.

(4) Bachelor of Science in Fine Arts Education. This degree is awarded to students who have completed the combined course of study at the Portland School of Fine and Applied Art and Westbrook Junior College and the final year of work as prescribed at the University of Maine.

Courses of Instruction

Courses designated by an odd number are given in the fall semester, those designated by an even number, in the spring semester.

When a course is offered in the first semester and also repeated in the second, it is designated by two numbers, the second of which is in parenthesis.

A period between the numbers designating a two-semester course indicates either semester may be taken for credit.

Courses numbered 1-50 are for undergraduates only; courses numbered 51-100 are primarily for upperclassmen and graduates; courses numbered above 100 are primarily for graduates.

For courses in Psychology, see Department of Psychology in the College of Arts and Sciences.

PROFESSORS LUTES AND CHADBOURNE; ASSOCIATE PROFESSOR JACKMAN; ASSISTANT PROFESSOR CRAWFORD; MISS WILSON

29 (30). SUPERVISED STUDENT TEACHING.—A course in student teaching in academic subjects. Open to a limited number of seniors recommended by the Dean of the School of Education and approved by the heads of the academic departments. Preference is given to those who have completed Education 77 or 78. *Five hours a week. Three credit hours.*

MR. JACKMAN

29a. SUPERVISED TEACHING IN ENGLISH.—Supervised tutoring of small groups of freshmen deficient in the mechanics of composition. Weekly conferences with the instructor in charge. Open to qualified seniors whose major subject is English. *Two class hours weekly, first or second half semester. One credit hour.* MR. JACKMAN, MRS. CRANDON

43 (44). CHARACTER EDUCATION.—A study of the nature of character and a critical appraisal of the means employed to cultivate it in young people with reference to theories of mental hygiene and progressive education. Prerequisite, Psychology 1, 2. *Three hours a week.* MISS WILSON

49 (50). EDUCATION SEMINAR.—This course is required of seniors in education one semester, and is designed to help integrate the various courses in education for the comprehensive examination. *Three hours a week.*

THE DEPARTMENTAL STAFF

51. HISTORY OF EDUCATION IN THE UNITED STATES.—Evolution of education, educational institutions, school systems and practices of the American people. Open to juniors and seniors. *Three hours a week.*

MISS CHADBOURNE

52. History of Education in Maine.—A study of the evolution of the educational system in the State from its earliest period to the present time. Open to juniors and seniors. *Three hours a week.*

Miss Chadbourne

53. History of Ancient and Medieval Education.—Historical analysis and interpretation of the more important elements in modern education derived from the Hebrews, Greeks, Romans, Middle Ages, and Renaissance. Open to juniors and seniors. *Three hours a week.* Miss Chadbourne

54. History of Modern Education.—Evolution of present-day educational theory; institutions and practices of modern civilizations from the time of the Reformation up to the present. Open to juniors and seniors. *Three hours a week.* Miss Chadbourne

56. Maine School Law.—The purpose of this course is to present the present-day Maine school law and the steps by which it has been evolved. Primarily for seniors and graduate students. Given in the spring semester of 1939 and alternate years. *Two hours a week.* Miss Chadbourne

59 (60). Principles of Secondary Education.—A course in the application of the principles of education with special reference to the problems of high-school teaching. The aims of secondary education in a democracy in terms of skills, knowledges, tastes, and ideals which are demanded in modern life. Primarily for juniors and seniors. Open to sophomores by permission. *Three hours a week.* Mr. Lutes

61. School Administration.—The general problems of school organization and administration in the United States. Primarily for seniors. Open to others by permission. *Three hours a week.* Mr. Lutes

62. Secondary School Administration and Supervision.—A practical course for those who are looking forward to positions as high-school principals or supervisors. Problems of organization, teacher selection and rating, improvement of teachers in service, salary schedules, extra-curricular activities, testing programs, and techniques of supervision will be emphasized. Primarily for seniors. Open to others by permission. *Three hours a week.*

Mr. Lutes

63. Junior High School Education.—The course presents a theory of the junior high school based upon the psychology of adolescence, and shows the consequences of such theory in the formation and treatment of curriculum. Open to juniors and seniors. Given in 1939-40 and alternate years. *Two hours a week.* Mr. Jackman

65 (66). Educational Measurements.—An introduction to educational measurements including principles of measurements, informal and

standardized educational tests, group mental tests, and the uses of elementary statistics in educational measurements. Open to juniors and seniors. Classroom, *two hours a week;* laboratory, *two hours a week. Three credit hours.*
MR. CRAWFORD

68. EDUCATIONAL AND VOCATIONAL GUIDANCE IN SECONDARY SCHOOLS.—The aim is to present to prospective teachers the general problem of guidance in junior and senior high schools, with especial reference to the vocational phase, organization for guidance, necessary materials and techniques of counseling. Open to juniors and seniors. *Three hours a week.* MR. JACKMAN

71. PSYCHOLOGY OF SECONDARY EDUCATION.—A study of the adolescent age and its characteristics. Psychological principles which determine the scope and character of secondary education. Open to students who have passed Psychology 1, 2 with a grade of C; to others by permission. *Three hours a week.* MR. LUTES

74. EXTRA-CURRICULAR ACTIVITIES IN THE SECONDARY SCHOOL.—This course is designed to acquaint the prospective high-school teacher with the nature and scope of non-academic cultural and recreational activities related to the needs of adolescence, and to aid the teacher in developing a technique for their promotion, and for their correlation with the usual academic courses. Given in 1938-39 and alternate years. *Two hours a week.* MR. JACKMAN

75. TEACHING THE SOCIAL STUDIES IN SECONDARY SCHOOLS.—The purpose of the course is to acquaint the prospective teacher of the social sciences with a point of view and vital methods of presentation that will tend to make these subjects effective in the everyday problems of living. Open to juniors and seniors. Given in 1939-40 and alternate years. *Two hours a week.*
MR. JACKMAN

77 (78). METHODS OF TEACHING IN SECONDARY SCHOOLS.—A general course in methods for prospective high-school teachers. Open to seniors and juniors who have had General Psychology. *Three hours a week.*
MR. JACKMAN

81. SUPERVISION IN THE ELEMENTARY SCHOOL.—The theory of supervision in general and specific methods of supervision of the prominent elementary-school subjects will be considered. Open to normal-school graduates, and students with teaching experience. Others by permission. *Three hours a week.* MR. CRAWFORD

84. ADMINISTRATION OF THE ELEMENTARY SCHOOL.—A course for prospective superintendents and elementary-school principals. Open to normal-school graduates and students with teaching experience; to others by permission. *Three hours a week.* MR. CRAWFORD

95. 96. PHILOSOPHY OF EDUCATION.—A course for seniors and graduate students designed primarily for the reading and discussion of conflicting factors in education with a view to their criticism and coördination. *Two hours a week.* MISS CHADBOURNE

97. 98. CURRENT PROBLEMS IN EDUCATION.—Each student is assigned special problems in the field of education. Primarily for majors in education. Open by permission to others. Seniors only. *Two hours a week.*
MR. LUTES AND STAFF

105. METHODS OF RESEARCH IN EDUCATION.—A course in principles and techniques of educational research. Designed primarily for graduate students writing theses in education. Opportunity will be afforded to use thesis problems to illustrate the principles and techniques emphasized in the course. This course will be required of graduate students majoring in education. *Two hours a week .* MR. LUTES

College of Technology

GENERAL INFORMATION

The College of Technology provides technical instruction in chemistry, various branches of engineering, engineering physics, and pulp and paper technology. The various engineering curricula have been arranged to fit the needs of most students. Although not stated in the outline of courses, bands of electives have been arranged for the student having decided aptitudes or preference, so that a sequence of studies in any one of several groups of non-technical subjects, which will especially train him for work in those fields in which he is interested, may be pursued. These elective groups are: (1) mathematics and science, (2) economics and psychology, (3) history, psychology, and sociology, (4) foreign language, (5) literature.

Those students showing marked inventive or research abilities are guided to studies in mathematics and science; those with tendencies for commercial or managerial work are advised to elect the second or third group; and for the students with strong preference for language or literature, the fourth and fifth groups are provided.

Orientation lectures, which engineering freshmen are required to attend, and conferences with faculty advisers during his first year are designed to assist the freshman in the final selection of his course.

Students taking Mathematics 11 and 12 in the freshman year, and Mathematics 7a and 8a in the sophomore year, are selected (by the Department of Mathematics and the College of Technology) on the basis of proficiency in mathematics.

Under each of the curricula described below is given a tabulated statement of the subjects pursued and the amount of work required. The College comprises:

Chemical Engineering Curriculum
- Pulp and Paper Option
- Administrative Option

Chemistry Curriculum
Civil Engineering Curriculum
Electrical Engineering Curriculum
Engineering Physics Curriculum
General Engineering Curriculum
Mechanical Engineering Curriculum

The following requirements for graduation are common to all curricula in this college:

1. A total of 143 semester hours exclusive of Military Training 1, 2, 3, and 4, and physical training. Three of these hours may be for thesis. Eight credit hours may be allowed for advanced military. Of the courses required for graduation, in which letter grades are given, 105 hours must be passed with a grade of C or above; or, in the case of those students who are excused from Military or who enter with advanced standing from other institutions, 70 per cent of the credit hours offered for graduation, in which letter grades are given, must be passed with a grade of C or above. This ratio of hours should be maintained throughout the course from the beginning.
2. Drawing, four semester hours.
3. Language: English and Public Speaking, twelve semester hours with a minimum of two semester hours and a maximum of four semester hours of Public Speaking.
4. Mathematics, eighteen semester hours.
5. Military science, seven semester hours. Physical Training, two years.
6. Science: Chemistry, eight semester hours; Physics, ten semester hours.
7. Comprehensive Examinations:

   Comprehensive examinations for sophomores are given at the end of the sophomore year and used as a guide, in conjunction with the actual student grades, to determine fitness to undertake the professional studies of the junior and senior years.

   A comprehensive examination, which is given to all seniors, must be passed to the satisfaction of the major department.

At graduation in any of these curricula the student receives the degree of Bachelor of Science.

Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis, he may receive the degree of Master of Science. Five or more years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive a professional degree.

Honors Course

Attention is called to the tutorial honors course which is open to superior students in engineering who may desire to supplement their field of concentration by study under individual tutorial guidance. A fuller description of this course is to be found at the beginning of the section devoted to General Courses.

Course Expenses

The following statement about the expenses incurred by students in the College is intended to supplement the material contained in the section on expenses, beginning on page 68.

For College of Technology students the minimum and maximum course expenses (includes required equipment, books, and supplies) are indicated in the following table:

	Fall Semester	Spring Semester
Freshmen	$80.00*, †	$7.00
Sophomores	50.00†-72.00†	11.00-20.00
Juniors	22.00-43.00	10.00-23.00
Seniors	20.00-39.00	10.00-28.00

* Includes $18.50 for drawing equipment, which is used in all drawing courses.

† Includes a military deposit ($30.00) for the entire year. Net cost of the course depends upon amount of equipment and clothing lost, destroyed, worn out, or held out by students, refund being made for that turned back in satisfactory condition to the Military Department.

Civil Engineering Summer Camp tuition for University of Maine students is $15.00. All other students are charged regular Summer Session tuition.

MAINE TECHNOLOGY EXPERIMENT STATION

General Statement

By action of the Board of Trustees, June, 1915, the establishment of a Maine Technology Experiment Station was authorized. This station is under the direct control of the Dean of the College of Technology and the heads of the departments.

Income

The income of the Station is derived from University appropriations and from the State Highway Department.

Object

The objects of the Station are to carry on practical research in engineering subjects, make investigations for State boards and municipal authorities, furnish scientific information to the industries of the State, and distribute accurate scientific knowledge to the people of the State.

Equipment

Most of the Station offices and laboratories are at present located in Wingate Hall, described in the section on University buildings. The Station is well equipped for the testing of concrete and highway materials, both bituminous and non-bituminous. Crosby Mechanical Engineering Laboratory is available for researches in the fields of hydraulics, steam-engineering, gas-engineering, metallography, and strength of materials. The electrical power laboratory in Lord Hall includes among its equipment a 150,000 volt testing transformer and standard instruments for calibration purposes. The communication laboratories in this building offer facilities for telephone transmission testing and radio research. The division of Pulp and Paper Technology in Aubert Hall is equipped for the testing of pulp and paper products. The highway materials laboratory in the basement of Wingate Hall is equipped jointly by the Civil Engineering Department and the Maine State Highway Department. A new soil mechanics laboratory in the basement of Lord Hall has been jointly equipped by the Civil Engineering Department, the Maine State Highway Department, and this station.

Investigations

The principal line of research has been in the field of concrete and concrete materials. Some work has also been started in the pulp and paper industry. Researches are also being conducted in the electrical, mechanical, and chemical fields. In the field of concrete materials the Station is coöperating with the American Society for Testing Materials in the statistical analysis of data. Research in the field of soil mechanics has been undertaken at the Highway Materials Testing Laboratories.

Publications

The Station issues two series of publications: Bulletins and Papers. It has issued thirty-four Bulletins and twenty-five Papers. The papers have been issued as reprints from such technical journals and magazines as: Proc.

Nat. Acad. of Sciences, Proc. Am. Soc. for Testing Materials, Proc. Am. Conc. Inst., Proc. Am. Soc. Civil Eng., Electrical Engineering, Journal Me. Assn. of Engrs., and Industrial and Engineering Chemistry.

CURRICULA

FRESHMAN YEAR

Common to all engineering courses and Chemistry

Fall Semester				*Spring Semester*			
Subject	Hours			Subject	Hours		
	Rec.	Lab.	Cr.		Rec.	Lab.	Cr.
Ch 1 Gen. Chemistry	2	4	4	Ch 2 Gen. Chemistry	2	4	4
Eh 1 Freshman Comp.	3	0	3	Eh 2 Freshman Comp.	3	0	3
Md 1 Funds. Draft.	0	4	2	Md 2 Ely. Mach. Draft.	0	4	2
Ms 1 Trigonometry	2	0	2	Ms 6 Anal. Geom.	4	0	4
Ms 3 Algebra	2	0	2	Mt 2 Military	2	1	1½
Mt 1 Military	2	1	1½	Ps 2b General Physics	4	2	5
Ps 1b General Physics	4	2	5	Pt 2 Phy. Education	0	2	0
Pt 1 Phy. Education	0	2	0	Gc 6 Orientation	1	0	½
Gc 5 Orientation	1	0	½				

Chemical Engineering Curriculum

This curriculum is designed to train students to become chemical engineers and leads to the Bachelor of Science degree in Chemical Engineering. See Pulp and Paper Option page 249. See Administrative Option page 253. The first two years are almost identical with those under the Chemistry curriculum, but in the junior and senior years the students enrolled take fundamental courses in chemical engineering, supported by related work in other engineering fields.

Graduates will be prepared to enter the profession of chemical engineering and to occupy positions as production foremen, plant directors, research and chemical engineers in industrial plants. Chemical engineering graduates from this Department are now holding responsible positions as consulting chemical engineers, industrial sales engineer, assistant plant superintendent, research chemical engineer, research engineer and plant director. Graduates from recent classes hold such positions as examiner in U. S. Patent Office, engineer, assistant traffic manager in a chemical company, and several posi-

tions designated as chemist. Superior students should give serious consideration to an additional year's study for the Master of Science degree in Chemical Engineering.

A course in Chemical Engineering Practice is open to a selected group of Chemical Engineering undergraduate and graduate students. By this arrangement seniors and graduate students may participate in investigations in actual plant operation, thus obtaining valuable and unusual experience.

The student must register for all courses listed in the first group for each semester, unless in exceptional circumstances he is permitted to substitute an approved elective for a course printed in italics. Courses in this group not italicized *must be passed* before he is eligible for graduation.

The student must select sufficient hours to bring his total to that required by the College, namely, 143 exclusive of Military. See also statements on pages 243 and 244.

FRESHMAN YEAR

Common to all engineering courses. See page 247.

SOPHOMORE YEAR

Fall Semester

Subject	Hours		
	Rec.	Lab. or Comp.	Cr.
Ch 41 Quant. Anal.	1	8	4
Ch 51 Organic Chem.	3	4	5
ChE 33 Elementary Stoichiometry	3	0	3
Ms 7 Diff. Calculus	5	0	5
Mt 3 Military	2	1	2
Pt 3 Phy. Education	0	2	0

Spring Semester

Subject	Hours		
	Rec.	Lab. or Comp.	Cr.
Ch 22 Intro. Theoret. Chem.	*3*	*0*	*3*
Ch 32 Micro-Qual. Anal.	2	3	3
Ch 52 Organic Chem.	3	4	5
Ee 30 Dir. Current Mach.	2	0	2
Ms 8 Int. Calculus	5	0	5
Mt 4 Military	2	1	2
Pt 4 Phy. Education	0	2	0

JUNIOR YEAR

Fall Semester					*Spring Semester*				
Subject		Hours			Subject		Hours		
		Rec.	Lab. or Comp.	Cr.			Rec.	Lab. or Comp.	Cr.
Ch 71	Phys. Chem.	3	4	5	Ch 72	Phys. Chem.	3	4	5
ChE 75	Els. of Chem. Eng.	3	0	3	ChE 76	Els. of Chem. Eng.	3	0	3
Ee 31	Alt. Currents	2	0	2	*Gm 20*	*German for Chemists*	*3*	*0*	*3*
Ee 33	Elec. Lab.	0	3	1½	Mn 54	Mechanics	3	0	3
Gm 19	*German for Chemists*	*3*	*0*	*3*	Pb 2	Pub. Speaking	2	0	2
Mn 53	Mechanics	3	0	3	*Ps 82*	*Adv. Lab. Physics*	*0*	*4*	*2*

SENIOR YEAR

Subject		Hours			Subject		Hours		
		Rec.	Lab. or Comp.	Cr.			Rec.	Lab. or Comp.	Cr.
Ch 61	Technical Anal	1	8	4	Ch 86	Journal Seminar	2	0	2
ChE 77	Inorgan Tech.	3	0	3	*ChE 50*	*Thesis*	*Arr*		*1-3*
ChE 81	Chem. Eng. Lab	1	4	3	ChE 78	Organ. Tech.	3	0	3
ChE 87	*Chem. Eng. Practice*	*0*	*9*	*3*	ChE 82	Chem. Eng. Lab.	1	4	3
					ChE 84	Unit Processes	1	4	3
Eh 5	Tech. Comp	2	0	2	*Eh 10*	*Modern Lit.*	*2*	*0*	*2*
Me 43	Heat Eng.	3	0	3	Me 40	Mechanical Lab.	0	3	1½

Credit will not be given for election of courses covering substantially the same ground as another elected or required course that has been passed, i.e., Ce 35 and Ce 26.

Students desiring to elect any course may do so only with approval of the major instructor. Such free electives will be limited in number.

Since every university granting the Ph.D. degree requires a reading knowledge of both French and German, it is advisable for the student who may continue with graduate work to be prepared in this respect.

Pulp and Paper Option

This curriculum is offered to furnish training in the fundamentals of mathematics, chemistry, engineering, and pulp and paper technology. The

first two years are identical with those under the Chemical Engineering curriculum, but in the junior and senior years the students enrolled take, in part, fundamental courses in chemical, electrical, and mechanical engineering, mechanics, and pulp and paper technology. Graduates in this option, who receive the degree of Bachelor of Science in Chemical Engineering (Pulp and Paper Option), will be prepared to occupy positions as production foremen, salesmen, research chemists, and works-control chemists in pulp and paper plants and in chemical industries.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 247.

SOPHOMORE YEAR

Same as Chemical Engineering. See page 248.

JUNIOR YEAR

Fall Semester

Subject			Hours Rec. or Comp.	Lab.	Cr.
Bt	43	Wood Iden.	0	3	1
Ch	71	Phys. Chem.	3	4	5
ChE	75	Els. of Chem. Eng.	3	0	3
Ee	31	Alt. Current	2	0	2
Ee	33	Elec. Lab.	0	3	1½
Gm	*19*	*German for Chemists*	*3*	*0*	*3*
Mn	53	Mechanics	3	0	3
Pa	65	Pulp Tech.	3	0	3
		Electives	—	—	—

Spring Semester

Subject			Hours Rec. or Comp.	Lab.	Cr.
Ch	72	Phys. Chem.	3	4	5
ChE	76	Els. of Chem. Eng.	3	0	3
Eh	*10*	*Modern Lit.*	*2*	*0*	*2*
Gm	*20*	*German for Chemists*	*3*	*0*	*3*
Mn	54	Mechanics	3	0	3
Pa	66	Paper Tech.	3	0	3
Pb	2	Public Speak.	2	0	2
		Electives	—	—	—

SUGGESTED ELECTIVE COURSES

Elective Band 1

By	1	Bacteriology and	0	6	3
By	3	Bacteriology	2	0	2
By	5	Bacteriology	0	2	1
Ce	13	Phys. Geology	3	0	3
Ch	61	Technical Anal.	1	8	4

SUGGESTED ELECTIVE COURSES

Elective Band 1

By	2	Bacteriology	0	6	3
Ce	18	Hist. Geology	3	0	3
Me	24	Machine Design	2	3	3
Ps	62	Heat & Thermo.	3	0	3

	Elective Band 2			
Ba 51	Corp. Finance	3	0	3
Es 73	Labor Problems	3	0	3
Ms 17	Invest. Theory	2	0	2
Py 1	Gen. Psychology	2	2	3
	Elective Band 3			
Py 1	Gen. Psychology	2	2	3
	Elective Band 4			
Gm 19	French or German for Chem.	3	0	3

	Elective Band 2			
Es 52	Business & Govt.	3	0	3
Ms 18	Invest. Theory	2	0	2
Py 2	Gen. Psychology	2	2	3
Py 12	Advertising	3	0	3
	Elective Band 3			
Py 2	Gen. Psychology	2	2	3
Py 12	Advertising	3	0	3
	Elective Band 4			
Gm 20	French or German for Chem.	3	0	3
	Elective Band 5			
Eh 78	Creative Writing	3	0	3
Pb 4	Debate	2	0	2

SENIOR YEAR

Fall Semester

Subject		Hours Rec. or Comp.	Lab.	Cr.
ChE 77	*Inorgan. Tech.*	*3*	*0*	*3*
ChE 81	Chem. Eng. Lab.	1	4	3
Eh 5	Tech. Comp.	2	0	2
Me 43	Heat Engineering	3	0	3
Pa 67	Pulp. Mfg. (9 wks.)	0	8	2
Pa 83	Chem. Eng. of Pulp and Paper Mfg.	3	0	3
Pa 87	Paper Test. and Anal.	0	4	2
Pa 89	*Pulp and Paper Practice*	*0*	*9*	*3*
	Electives	—	—	—

Spring Semester

Subject		Hours Rec. or Comp.	Lab.	Cr.
ChE 78	*Organic Tech.*	*3*	*0*	*3*
ChE 82	Chem. Eng. Lab.	1	4	3
ChE 84	*Unit Processes*	*1*	*4*	*3*
Me 40	Mech. Lab.	0	3	1½
Pa 50	*Thesis*	*Arr*		*1-3*
Pa 68	Paper Mfg.	0	4	2
Pa 82	Pulp Coloring and Bleaching	0	4	2
Pa 86	Cellulose	0	4	2
	Electives	—	—	—

Suggested Elective Courses				Suggested Elective Courses			
Elective Band 1				**Elective Band 1**			
Ce 35 Hydraulics	2	0	2	Ce 26 Hydraulics	3	0	3
Ch 73 Chem.-Microscopy	0	6	2	Ch 74 Chem.-Microscopy	0	6	2
Ch 91 Adv. Org. Chem.	3	0	3	Ch 92 Adv. Org. Chem.	3	0	3
Ch 95 Thermodynamics	3	0	3	Ch 96 Electrochemistry	3	0	3
Mn 101 Adv. Mechanics	2	0	2	Me 98 Management	2	0	2
Ms 53 Adv. Calculus	3	0	3	Mn 102 Adv. Mechanics	2	0	2
Pa 49 Thesis	Arr.		1-3	Ms 54 Adv. Calculus	3	0	3
Elective Band 2				**Elective Band 2**			
Ce 17 Econ. Geology	2	0	2	Ms 20 Statistics	2	0	2
Ms 19 Statistics	2	0	2	Py 82 Mental Measurement	1	4	3
Py 81 Mental Measurement	1	4	3				
Elective Band 3				**Elective Band 3**			
Hy 21 Cur. World Prob.	2	0	2	Hy 22 Cur. World Prob.	2	0	2
Py 81 Mental Measurement	1	4	3	Py 82 Mental Measurement	1	4	3
Elective Band 4				**Elective Band 4**			
Gm 21 German for Chemists	3	0	3	Gm 22 German for Chemists	3	0	3
Elective Band 5				**Elective Band 5**			
Eh 9 Modern Lit.	2	0	2	Eh 10 Modern Lit.	2	0	2
				Pb 6 Persuasive Speech	2	0	2

Credit will not be given for election of courses covering substantially the same ground as another elected or required course that has been passed, i.e., Ce 35 and Ce 26.

The student must register for all courses listed in the first group for his year. Courses not italicized in this group *must be passed* before he is eligible for graduation. Courses in italics may have an approved elective substituted for them.

Required for graduation: a total of 143 semester hours exclusive of Military and Physical Training. Three of these hours may be for thesis.

Administrative Option

An administrative option is available to a few students who desire to qualify for positions in the technical business and sales branches of chemical industries. Registration for this curriculum must be made before the second semester of the sophomore year. Substitution of italicized courses in the Chemical Engineering curriculum may be made with the approval of the head of the department. A superior scholastic record is required, and it is not possible to substitute for more than 17 nor less than 14 hours from the regular Chemical Engineering curriculum.

Chemistry Curriculum

The primary aim of the Chemistry curriculum is to present the principles and techniques of inorganic, analytical, organic, and physical chemistry. The training outlined in the Chemistry curriculum is designed to present to the student a very broad training in Chemistry and in related fields. In this way it is definitely contrasted with that training offered to the chemical engineer. Chemistry graduates will be prepared to undertake the great variety of problems which are the normal duties of a chemist.

The second aim is to develop a research attitude in the student as a preparation for graduate study and ultimately for research, industrial, and teaching positions in the chemical profession. Superior students should give serious consideration to the additional advantages offered by graduate study in chemistry.

Chemists who have graduated from this Department are now holding responsible positions as paint chemist, rubber chemist, consulting chemist, research chemist, university and secondary-school teachers of chemistry, development chemist, and chemist in United States and state experimental laboratories.

The student must register for all courses listed in the first group for each semester unless in exceptional circumstances he is permitted to substitute an approved elective for a course printed in italics. Courses not italicized *must be passed* before a student is eligible for graduation.

From the elective list the student must select ten additional credit hours in other sciences, two in English or Public Speaking, and sufficient additional hours to bring his total to that required by the College, namely, 143 exclusive of Military.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 247.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours	Lab. Rec. or Comp.	Cr.	Subject	Hours	Lab. Rec. or Comp.	Cr.
Ch 41 Quant. Anal.	1	8	4	Ch 22 Intro. Theoret. Chem.	3	0	3
Gm 19 German for Chemists	*3*	*0*	*3*	Ch 32 Micro-Qual. Anal.	2	8	5
Ms 7 Diff. Calculus	5	0	5	*Gm 20 German for Chemists*	*3*	*0*	*3*
Mt 3 Military	2	1	2	Ms 8 Int. Calculus	5	0	5
Pb 1 Pub. Speaking	2	0	2	Mt 4 Military	2	1	2
Pt 3 Phy. Education	0	2	0	Pt 4 Phy. Education	0	2	0
Electives	—	—	—	Electives	—	—	—

JUNIOR YEAR

Subject	Hours	Lab. Rec. or Comp.	Cr.	Subject	Hours	Lab. Rec. or Comp.	Cr.
Ch 51 Organic Chem.	3	4	5	Ch 52 Organic Chem.	3	4	5
Ch 71 Phys. Chem.	3	4	5	Ch 72 Phys. Chem.	3	4	5
Eh 9 Modern Lit.	2	0	2	Eh 6 Technical Comp.	2	0	2
Gm 21 German for Chemists	*3*	*0*	*3*	*Gm 22 German for Chemists*	*3*	*0*	*3*
Electives	—	—	—	Electives	—	—	—

SENIOR YEAR

Subject	Hours	Lab. Rec. or Comp.	Cr.	Subject	Hours	Lab. Rec. or Comp.	Cr.
Ch 49 Thesis	*Arr.*		*1-3*	*Ch 50 Thesis*	*Arr.*		*1-3*
Ch 63 Adv. Quant. Anal.	1	8	4	Ch 54 Adv. Inorgan. Chem.*	2	0	2
Ch 73 Chem. Microscopy	0	6	2	Ch 84 Metallurgy	3	0	3
Ch 89 Organic Prep.	0	6	2	Ch 86 Journal Seminar	2	0	2
Ch 91 Adv. Org. Chem.	3	0	3	Ch 92 Adv. Org. Chem.	3	0	3
Electives	—	—	4-6	Electives	—	—	6-8

* Alternates with Ch 56.

Credit will not be given for election of courses covering substantially the same ground as another elected or required course that has been passed.

Students desiring to elect any course not on a suggested list may do so only with approval of major instructor. Such free electives will be limited in number.

*Since every university granting the Ph.D. degree requires a reading knowledge of both French and German, it is advisable for the student who may continue with graduate work to be prepared in this respect.

Civil Engineering Curriculum

The object of the curriculum in Civil Engineering is to give the student a thorough knowledge of the principles underlying the profession.

The methods of instruction are recitations, lectures, original problems, work in the testing laboratories, field practice, and designing. Effort is made to acquaint the student with the best engineering practice and with the standard engineering literature. During each year it is the practice to have several lectures by engineers from other institutions and by those engaged only in practical work. These lectures tend to increase the interest of the student and to bring him in touch with men from outside his own institution.

The endeavor is made to impress upon the mind of the student that he must obtain experience and judgment, without which he can never become a successful engineer. Besides giving the student a technical training, an opportunity is offered for every student to form the basis of a liberal education.

The work of the first year is the same for all engineering students. The technical work begins in the fall semester of the second year with field work and the study of surveying. This technical work is gradually increased until the senior year, when it is nearly all professional. At the beginning of the senior year an opportunity is offered to elect one of three options. The first, called Option 1, consists of work in hydraulic engineering; the second, Option 2, consists of work in highway engineering; while Option 3 is specialized along the lines of sanitary engineering.

At present there is some demand for a course which will prepare a young man for work in the field of city management. After a careful survey of the needs of such a course, a five-year curriculum has been planned. The curriculum is not listed here but will be supplied upon request. Briefly it includes the major portion of Options 2 and 3 with a wide variety of elective courses in accounting, economics, history, and government.

Through the courtesy of the Bangor Hydro-Electric Company, their plant at Stillwater has been made available to the University for experimentation and research. Those students electing Option 1 will determine the efficiency

and cost of operation of the plant. A study will be made of its hydraulic design and structural features with a view to recommending improvements.

The facilities of the Maine State Highway Testing Laboratory are available for experimentation and research by students in the Civil Engineering Department. All students electing Option 2 make a complete design and cost estimate of a section of highway surveyed during Summer Camp.

Those students electing Option 3 coöperate with the State Public Health Department in making a sanitary survey of a nearby watershed which is a present or prospective source of public water supply. They also make a survey of the sanitary conditions in a nearby town.

Each student is urged to select a thesis, the treatment of which helps to develop initiative and original thought, besides treating in a comprehensive manner some subject in which he is most interested.

All sophomore Civil Engineering students are required to attend Summer Camp from June 19 to July 29, 1939.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 247.

SOPHOMORE YEAR

Fall Semester

Subject			Hours		
			Rec.	Lab. or Comp.	Cr.
Ce	1	Plane Surveying	2	0	2
Ce	3	Field Work & Plotting	0	9	3
Md	3	Des. Geometry	0	6	2
Ms	7	Diff. Calculus	5	0	5
Mt	3	Military	2	1	2
Pb	1	Pub. Speaking	2	0	2
Pt	3	Phy. Education	0	2	0
		Elective	—	—	—

Spring Semester

Subject			Hours		
			Rec.	Lab. or Comp.	Cr.
Ce	10	Curves and Earthwork	3	0	3
Ce	16	Geology	2	0	2
Ms	8	Int. Calculus	5	0	5
Mt	4	Military	2	1	2
Pb	6	Persuasive Speech	2	0	2
Ps	22	Mechanics & Heat Lab.	0	4	2
Pt	4	Phy. Education	0	2	0
		Elective	—	—	—

SUMMER CAMP

Subject	Hours. Cr.
Ce 11s Highway & Railroad Surveys	3
Ce 24s Geodetic & Topographic Surveying	2
Ce 51s Hydrographic Surveying	1

JUNIOR YEAR

Fall Semester

Subject	Hours Rec. or Comp.	Lab.	Cr.
As 11 Pract. Astron.	2	1½	2½
Ce 23 Adv. Surveying	1	0	1
Ce 25 Eng. Geology	2	3	3
Ce 29 Highway Const.	2	0	2
Ce 33 San. Eng. & Water Supply	2	3	3
Mn 51 Mechanics	5	0	5
Elective	—	—	—

Spring Semester

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ce 20 Structural & Highway Materials	1	4	3
Ce 26 Hydraulics	3	0	3
Ce 52 Theory & Des. of Steel Structures	5	0	5
Mn 52 Mechanics	5	0	5
Elective	—	—	—

SENIOR YEAR

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ce 57 Conc. Structures & Foundations	5	0	5
Ce 59 Drafting	0	9	3
Ee 35 D. C. Machy.	2	0	2
Me 39 Mech. Lab.	0	3	1½
Highway Option			
Ce 53 Hyd. Eng.	0	2	1
Ce 63 Highway Econ.	3	0	3
Hydraulic Option			
Ce 51 Hyd. Eng.	0	4	2
Ce 55 Hydrology	2	0	2
Sanitary Option			
By 3 Bacteriology	2	0	2
Ce 71 Sanitary Eng.	2	0	2

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ce 60 Drafting	0	6	2
Ee 36 Alt. Currents	2	0	2
Ee 38 Elec. Lab.	0	3	1½
Eh 6 Tech. Comp.	2	0	2
Ba 16 Business Law	3	0	3
Highway Option			
Ce 68 Highway Design	0	4	2
Ce 72 Highway Eng.	2	0	2
Hydraulic Option			
Ce 56 Hyd. Eng.	0	4	2
Me 78 Hyd. Lab.	0	3	1½
Sanitary Option			
By 2 Bacteriology	0	6	3
Ce 74 Sanitary Eng.	2	0	2

Electrical Engineering Curriculum

This curriculum is intended to provide the student with a thorough understanding of the underlying principles of electrical engineering and to develop an ability to solve problems of an engineering nature from commercial as well as technical premises. To accomplish this, the student first studies the various electrical laws and methods of electrical measurements and correlates them with various laws previously assimilated in the study of physics and mathematics. These studies are followed by more advanced courses involving the fundamental electrical laws and theories and showing their application to the design, operation, and performance of electrical apparatus such as is used in the generation of electrical energy or in transforming electrical energy into mechanical energy for the various commercial requirements.

Courses in communication engineering form an important division of the work offered by the Department. These courses aim to provide the student with a thorough understanding of the basic principles of electrical communication, and to familiarize him with the design and operating characteristics of communication systems and competent apparatus. Electrical reproduction of sound for motion pictures is also treated, with some emphasis on architectural acoustics, speech, and hearing. Basic work in television and the industrial applications of vacuum tubes are made a part of the laboratory work of the Department.

It is the endeavor of the Department to acquaint the student with contemporary engineering practice, and, by persistent association of abstract analysis with practical problems, to equip him with the fundamentals of a successful career. Stress is laid upon the systematic reading of technical periodicals and the acquirement of a reference library. Effort is made to have lectures by active engineers and alumni following their profession, thus bringing the student into more intimate contact with the engineering world.

In addition to the purely electrical subjects, the student takes the customary work in mathematics, physics, mechanics, drawing, and allied engineering courses, together with the humanistic studies enumerated below.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 247.

SOPHOMORE YEAR

Fall Semester

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ee 1 Els. Elec. Eng.	2	5	4
Es 1b Prin. of Econ.	2	0	2
Md 3 Des. Geometry	0	6	2
Ms 7 Diff. Calculus	5	0	5
Mt 3 Military	2	1	2
Pb 1 Pub. Speaking	2	0	2
Py 1 General Psychology	2	2	3
Pt 3 Phy. Education	0	2	0

Spring Seme....

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ee 2 Els. Elec. Eng.	2	5	4
Ce 2 Plane Surveying	1⅔	⅓	2
Es 2b Prin. of Econ.	2	0	2
Ms 8 Int. Calculus	5	0	5
Mt 4 Military	2	1	2
Pb 6 Persuasive Speech	2	0	2
Py 2 General Psychology	2	2	3
Pt 4 Phy. Education	0	2	0

JUNIOR YEAR

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ee 13 Electronics	2	3	3
Ee 15 El. Cir. & Mach.	3	0	3
Ee 17 Elec. Lab.	1	3	2½
Eh 5 Tech. Comp.	2	0	2
Me 27 Kinematics	3	0	3
Mn 53 Mechanics	3	0	3
Options (One subject required)			
Ba 53 Money & Banking	3	0	3
Es 73 Labor Probs.	3	0	3
Ms 53 Adv. Calculus	3	0	3
Ms 55 Diff. Equations	3	0	3

Subject	Hours Rec. or Comp.	Lab.	Cr.
Ee 16 El. Cir. & Mach.	3	3	4
Ee 18 Elec. Lab.	1	3	2½
Ee 22 Tel. Com.	3	0	3
Ee 24 Tel. Lab.	0	3	1½
Me 44 Heat Eng.	3	0	3
Mn 54 Mechanics	3	0	3
Options (One subject required)			
Ba 54 Investments	3	0	3
Ms 54 Adv. Calculus	3	0	3

SENIOR YEAR

Fall Semester				*Spring Semester*			
Subject	Hours	Lab. Rec. or Comp.	Cr.	Subject	Hours	Lab. Rec. or Comp.	Cr.
Ee 51 Alt. Cur. Appar.	3	4	5	Options (Six subjects required)			
Ee 75 Elec. Lab.	1	3	2½				
Me 45 Heat Eng.	3	0	3				
Options (Two subjects required)				Ee 50 Thesis	Arr.		1-3
				Ee 56 Elec. Power Plants	3	0	3
Ee 49 Thesis	Arr.		1-3	Ee 58 Elec. Power Transm.	2	3	3
Ee 61 Illum. Eng.	3	0	3				
Ee 63 Elec. Transp.	3	0	3	Ee 60 Adv. Elec. Mach.	3	0	3
Ee 81 Comm. Eng.	0	6	2	Ee 76 Elec. Lab.	1	3	2½
Ee 83 Comm. Lab.	0	3	1½	Ee 84 Tel. Transm.	0	6	2
Ee 85 Radio Eng.	1	2	2	Ee 86 Radio Eng.	2	2	3
Ee 87 Eng. Acoustics	2	0	2	Ee 88 Radio Lab.	0	3	1½
Ee 91 Theory of Elect.	2	0	2	Ee 92 Theory of Elect.	2	0	2
Ba 51 Corp. Finance	3	0	3	Ba 16 Business Law	3	0	3
Me 41 Mech. Lab.	0	3	1½	Me 98 Management	2	0	2

Engineering Physics

The aim of this curriculum is to provide a fundamental background in science for those students who expect to enter the field of industrial physics and also for those who wish to prepare themselves for careers in research. There has been a growing demand on the part of industry for men trained primarily in physics in an engineering atmosphere. It is recognized that undergraduate specialization in one or more of the well-defined engineering fields is not a rigid requirement for success in industrial work. Certain students not only have an aptitude for but profit by an undergraduate curriculum primarily developed around basic courses in physics, chemistry, and mathematics beyond those required by engineering curricula generally. Physical engineering is the name sometimes used to characterize this field.

The work of the first year being the same for all engineering students, it is not until the fall of the second year that the added emphasis upon physics is realized. After this a sufficient amount of chemistry and mathematics is included in the curriculum along with courses in advanced physics to develop a sound scientific background. An opportunity is also provided through re-

quired or elective courses to gain an insight into each of the fields of engineering so that the student develops in an engineering atmosphere; there is more emphasis, however, on science than on engineering.

This course also prepares a student for graduate work in physics, if he is interested in further developing himself along research lines.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 247.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours Rec. or Comp.	Lab.	Cr.	Subject	Hours Rec. or Comp.	Lab.	Cr.
Ch 41a Quant. Analysis	1	6	3	*Ch 22 Intro. Theor. Chem.	3	0	3
*Es 1b Prin. of Economics	2	0	2	*Es 2b Prin. of Economics	2	0	2
*Gm 19 German for Chemists	3	0	3	*Gm 20 German for Chemists	3	0	3
Ms 7 Diff. Calculus	5	0	5	Ms 8 Integ. Calculus	5	0	5
Mt 3 Military	2	1	2	Mt 4 Military	2	1	2
Pb 1 Public Speaking	2	0	2	Ps 18 Intermed. Physics	3	0	3
Ps 17 Intermed. Physics	3	0	3	Ps 20 Int. Lab. Physics	0	2	1
Ps 19 Int. Lab. Phys.	0	2	1	Pt 4 Phys. Education	0	2	0
Pt 3 Phys. Education	0	2	0				
Electives				Electives			
Md 3 Des. Geometry	0	6	2	Me 10 Machine Work	0	4	1½
Me 9 Machine Work	0	4	1½	Ps 10 Meteorology	3	0	3

JUNIOR YEAR

Fall Semester

Subject	Hours	Lab. Rec. or Comp.	Cr.
*Ch 71 Physical Chem.	3	4	5
Eh 5 Technical Comp.	2	0	2
*Gm 21 German for Chemists	3	0	3
Mn 53 Mechanics	3	0	3
Ms 55 Diff. Equations	3	0	3
Ps 55 Elec. and Mag.	3	0	3
Electives			
Ce 1 Plane Surveying	2	0	2
Ee 1p Els. Elec. Eng.	2	3	3
Pa 65 Pulp Technology	3	0	3
Py 1 Gen. Psychology	2	2	3
Zo 3 Animal Biology	2	4	4

Spring Semester

Subject	Hours	Lab. Rec. or Comp.	Cr.
*Ch 72a Physical Chem.	3	0	3
Eh 10 Modern Lit.	2	0	2
*Gm 22 German for Chemists	3	0	3
Mn 54 Mechanics	3	0	3
Ee 30 D.C. Machinery	2	0	2
*Ps 60 Sound (or Elective)	3	0	3
Ps 68 Modern Physical Theories	3	0	3
Electives			
Ce 16 Geology	2	0	2
Ee 2p Els. Elec. Eng.	2	3	3
Pa 66 Paper Tech.	3	0	3
Py 2 Gen. Psychology	2	2	3
Zo 4 Animal Biology	2	4	4

* Substitutions may be made for courses marked * providing they are approved by the department head, with the exception that at least one year of German must be taken before graduation.

SENIOR YEAR

Subject	Hours	Lab. Rec. or Comp.	Cr.
Ch 51a Organic Chem.	3	0	3
Ee 36 Alt. Currents	2	0	2
Ms 53 Advanced Calculus	3	0	3
Ps 73 Light	3	0	3
Ps 81 Advanced Lab.	Arr.		1-3
Electives			

Subject	Hours	Lab. Rec. or Comp.	Cr.
Ms 54 Adv. Calculus	3	0	3
Ps 62 Heat and Thermodynamics	3	0	3
Ps 82 Adv. Lab. (Thesis)	Arr.		1-3
Electives			9

Electives (In addition to the preceding)				
ChE 75	Els. of Chem. Eng.	3	0	3
ChE 81	Chem. Eng. Lab.	1	4	3
Me 21	El. of Mech. Eng.	2	0	2
Me 33	Heat Engineering	3	0	3
Ms 105	Vector Analysis	3	0	3
Ps 31	Photography	2	2	3
Ps 57	Math. Physics	3	0	3

Electives (In addition to the preceding)				
Ce 26	Hydraulics	3	0	3
ChE 76	Els. of Chem. Eng.	3	0	3
ChE 82	Chem. Eng. Lab.	1	4	3
Ee 38	Electrical Lab.	0	3	1½
Me 22	Materials of Eng.	2	0	2
Me 34	Heat Eng.	3	0	3
Ps 66	Vac. Tubes and Thermionic Phenomena	3	0	3

General Engineering Curriculum

This curriculum is designed primarily to permit a selected few, preëminently capable students the opportunity of pursuing a curriculum which gives a broad emphasis on the fundamentals of engineering and to develop themselves along lines of particular aptitudes or choice. The first objective is met by including such studies as qualitative and quantitative analysis, physical chemistry, chemical engineering, metallurgy, geology, thermodynamics, the laws of the electric circuit, and the theory of structures. In addition to these studies in technical culture, a sequence of studies in any one of several groups in scientific culture, or liberal culture, is afforded.

These elective groups are: (1) mathematics and science, (2) economics and psychology, (3) history, psychology, and sociology, (4) foreign language, (5) literature.

Those students showing marked inventive or research abilities are guided to studies in mathematics and science; those with tendencies for commercial or managerial work are advised to elect the second or third group; and for the students with strong preference for language or literature, the fourth and fifth groups are provided.

Orientation lectures, which engineering freshmen are required to attend, and conferences with faculty advisers during his first year are designed to assist the freshman in the final selection of his course.

This course is also particularly adapted to the needs of the student who prefers to specialize in a graduate rather than in an undergraduate course and can utilize the latter as preparation for the former. In such a case a student at the beginning of the sophomore year would definitely select certain fundamental studies in one of the four departments: Chemical Engineering, Civil Engineering, Electrical Engineering, or Mechanical Engineering, and pursue, during the course, a sequence of studies in that department.

Arrangements have been completed with the Department of Economics so that a student starting with certain electives in that department in the sophomore year, would be able to obtain a degree of Master of Science in Economics by an additional fifth year of study, after obtaining the B.S. in General Engineering at the end of four years.

The Dean of the College is the adviser and registering officer for students in this course.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 247.

SOPHOMORE YEAR

Fall Semester				*Spring Semester*			
Subject	Hours Rec. or Comp.	Lab.	Cr.	Subject	Hours Rec. or Comp.	Lab.	Cr.
Ch 41 Quant. Anal.	1	8	4	Ce 16 Geology	2	0	2
Es 1a Prin. of Econ.	3	0	3	Ch 32 Micro-Qual. Anal.	2	8	5
Ms 7 Diff. Calculus	5	0	5	Es 2a Prin. of Econ.	3	0	3
Mt 3 Military	2	1	2	Ms 8 Int. Calculus	5	0	5
Pb 1 Public Speaking	2	0	2	Mt 4 Military	2	1	2
Electives				Electives			
Ee 1 Els. Elec. Eng.	2	5	4	Ce 2 Plane Surveying	1⅔	1⅓	2
				or			
				Ec 2 Els. Elec. Eng.	2	5	4

JUNIOR YEAR

Subject	Hours Rec. or Comp.	Lab.	Cr.	Subject	Hours Rec. or Comp.	Lab.	Cr.
Ch 71 Phys. Chem.	3	4	5	Ch 72 Phys. Chem.	3	4	5
Eh 5 Tech. Comp.	2	0	2	Eh 10 Mod. Lit.	2	0	2
Ba 9 Accounting	2	2	3	Ba 10 Accounting	2	2	3
Mn 53 Mechanics	3	0	3	Mn 54 Mechanics	3	0	3
Electives				Electives			
Ee 13 Electronics	2	3	3	Ce 26 Hydraulics	3	0	3
Me 27 Kinematics	3	0	3	ChE 76 Els. Chem. Eng.	3	0	3
Ms 55 Diff. Equations	3	0	3	Ch 84 Metallurgy	3	0	3

SENIOR YEAR

Fall Semester					*Spring Semester*				
Subject		Hours			Subject		Hours		
		Rec. or Comp.	Lab.	Cr.			Rec. or Comp.	Lab.	Cr.
Ba 51	Corp. Finance	3	0	3	Ce 52	Theory & Des. of Structures	5	0	5
Me 33	Heat Eng.	3	0	3	Me 34	Heat Eng.	3	0	3
Me 37	Mech. Lab.	0	3	1½	Me 38	Mech. Lab.	0	3	1½
	Electives					Electives			
ChE 75	Els. Chem. Eng.	3	0	3					
Ee 15	El. Cir. & Mach.	3	0	3	Ee 16	El. Cir. & Mach.	3	3	4
Ee 17	Elec. Lab.	1	3	2½	Ee 18	Elec. Lab.	1	3	2½
Es 73	Labor Prob.	3	0	3					

Mechanical Engineering Curriculum

The field of the mechanical engineer embraces all work involving the design, construction, or installation of machinery, either for manufacturing, transportation, or power generation; the design, manufacture, and installation of heating and ventilating or refrigerating equipment; the superintendence or management of factories, power plants, and motive power; the equipment of railways, and similar work.

The Mechanical Engineering curriculum is arranged to equip men as well as possible in four years' time to enter any of these lines of work.

It is not possible to develop the student into an expert engineer in any branch of the profession. It is also not possible, in general, to foresee what will be his ultimate occupation. Accordingly, those subjects which are fundamental to all engineering work and which may best be learned in college are most emphasized in the required courses, while those subjects which are best acquired in practical work are left for the engineer graduate to obtain in actual practice. An endeavor is made, however, to give the more advanced technical courses such a trend as to make the period of adjustment of the graduate to practical engineering conditions short, and his acquirement of the knowledge necessary for advancement rapid.

The theoretical work is taught by lectures and recitations. The texts are carefully chosen and are supplemented, where necessary to illustrate more recent practice, by explanation and examples given by the instructor. Numerous problems are assigned for work outside the classroom to make sure the student can apply the principles learned.

Courses in the shops and laboratories illustrate the application of matter learned in the recitation work, and also teach methods of construction, operation, and testing of apparatus by direct contact with it. In the drawing rooms, applications of theories to work in design are taught, together with methods and requirements for the production of neat and accurate engineering drawings.

Thorough instruction is given in the theory and operation of both direct and alternating current electrical machinery, with ample practice in the electrical laboratory. Lectures by practical engineers and trips of inspection to engineering works help to bring before the student the conditions existing in practice.

FRESHMAN YEAR

Common to all engineering courses and Chemistry. See page 247.

SOPHOMORE YEAR

Fall Semester

Subject	Hours		
	Rec. or Comp.	Lab.	Cr.
Es 1b Prin. of Econ.	2	0	2
Md 3 Des. Geometry	0	6	2
Me 1 Foundry & Forging	0	6	2
Me 21 Els. Mech. Eng.	2	0	2
Ms 7 Diff. Calculus	5	0	5
Mt 3 Military	2	1	2
Pb 1 Public Speaking	2	0	2
Ps 21 Mech. & Heat Lab.	0	4	2
Pt 3 Phy. Education	0	2	0

Spring Semester

Subject	Hours		
	Rec. or Comp.	Lab.	Cr.
Es 2b Prin. of Econ.	2	0	2
Md 4 Adv. Mach. Drafting	0	6	2
Me 2 Pattern Work	0	6	2
Me 22 Materials of Eng.	2	0	2
Me 36 Mech. Lab.	0	3	1½
Ms 8 Int. Calculus	5	0	5
Mt 4 Military	2	1	2
Pb 4 Debate or option	2	0	2
Pt 4 Phy. Education	0	2	0

JUNIOR YEAR

Fall Semester

Subject	Hours	Lab. Rec. or Comp.	Cr.
Es 73 Labor Problems or Option	3	0	3
Me 7 Machine Work	0	6	2
Me 23 Kinematics	3	3	4
Me 33 Heat Eng.	3	0	3
Me 37 Mech. Lab.	0	3	1½
Mn 51 Mechanics	5	0	5

Spring Semester

Subject	Hours	Lab. Rec. or Comp.	Cr.
Eh 6 Tech. Comp.	2	0	2
Me 8 Machine Work	0	6	2
Me 24 Machine Design	2	3	3
Me 34 Heat Eng.	3	0	3
Me 38 Mech. Lab.	0	3	1½
Me 46 Heat Power	3	0	3
Mn 52 Mechanics	5	0	5

SENIOR YEAR

Subject	Hours	Lab. Rec. or Comp.	Cr.
Ce 35 Hydraulics	2	0	2
Ee 35 D.C. Machy.	2	0	2
Me 71 Mech. Lab.	0	3	1½
Me 81 Heat Eng.	2	3	3
Me 83 Ind. Management	2	0	2
Me 87 Machine Design	0	6	2
Me 93 Gas Engines	3	0	3
Py 3 App. Psychol. (or Option)	3	0	3

Subject	Hours	Lab. Rec. or Comp.	Cr.
Ee 36 Alt. Currents	2	0	2
Ee 38 Elec. Lab.	0	3	1½
Me 50 Thesis (or Option)	Arr		3
Me 72 Mech. Lab.	0	3	1½
Me 86 Power Plants	3	0	3
Me 88 Dynamics of Machines	2	0	2
Me 90 Heat. & Vent.	3	0	3

Departments of Instruction

Courses designated by an odd number are given in the fall semester, those designated by an even number, in the spring semester.

A course given in the first semester and duplicated in the second semester is designated by two numbers, the second of which is in parenthesis.

Two-semester courses which may be taken either semester are designated with a period between the two numbers (e.g., 1. 2); if the first semester must be taken before the second can be taken, a semicolon is used (e.g., 1; 2); if both semesters must be taken to obtain credit, a dash is used (e.g., 1-2).

Courses numbered 1-50 are for undergraduates only; courses numbered 51-100 are primarily for upperclassmen and graduates; courses numbered above 100 are primarily for graduates.

CHEMISTRY AND CHEMICAL ENGINEERING

Professors Bradt, Brann, Brautlecht and Bray; Associate Professors Jenness, Otto and Nolan; Assistant Professors Caulfield and Gilliland; Mr. Osborn; Mr. Bogan; Mr. Tomlin; Mr. Martin

Courses in Chemistry

1; 2. General Chemistry.—This course deals with the general principles of the science and the elements of qualitative analysis. Classroom (lectures, discussion and demonstrations), *two hours a week*; laboratory, including recitations, *four hours a week*. One breakage card. *Four credit hours.* Mr. Bradt and Members of the Departmental Staff

5. Inorganic Chemistry.—For Home Economics students only. More of the laboratory time is devoted to drill on inorganic principles than in Course 1, 2. Classroom, *two hours a week;* laboratory, *four hours a week*. One breakage card. *Four credit hours.* Mr. Bogan

22. Introductory Theoretical Chemistry.—This is an introductory course in the fundamental principles of chemistry designed to prepare students for physical chemistry. It is recommended to majors in Chemistry and Chemical Engineering as well as other students desiring a second-year

elective in the Department of Chemistry. Prerequisite, Course 1, 2. Classroom, *three hours a week. Three credit hours.* MR. JENNESS

32. MICRO-QUALITATIVE ANALYSIS.—Systematic theoretical and laboratory study of the fundamental principle of analysis as applied to the common cations and anions. Analysis of unknowns. Microtechnique without use of the microscope. Prerequisite, Courses 1, 2. (Chemical Engineering students may take this course under the heading of 32a with *three hours* laboratory for *three credit hours*). Lectures and recitations, *two hours a week;* laboratory, *eight hours a week.* Two breakage cards. *Five credit hours.* MR. OTTO

41. QUANTITATIVE ANALYSIS.—An introductory course illustrating the fundamental principles of gravimetric, volumetric, and electrolysis methods. Prerequisite, Course 2. (Engineering Physics students may take this course under the heading of 41a, with *one* recitation and *six hours* of laboratory for *three credit hours.*) Classroom, *one hour a week;* laboratory, *eight hours a week.* Two breakage cards. *Four credit hours.* MR. OTTO

46. SANITARY CHEMISTRY.—For Civil Engineering students taking the Sanitary Engineering option, and other qualified students. This course is offered in alternate years. Given in 1939-40. (Two credit hours only for Chemistry majors.) Fundamental topics of water purification and waste disposal. Prerequisite, Course 1, 2. Lectures and recitations, *two hours a week;* laboratory, *three hours a week.* One breakage card. *Three credit hours.* MR. BOGAN

48. MINERALOGY AND CRYSTALLOGRAPHY.—This course is offered in alternate years. Given in 1939-40. Prerequisite, Chemistry 32. Classroom, *one hour a week;* laboratory, *four hours a week.* One breakage card. *Three credit hours.* MR. TREFETHEN

49. 50. THESIS.—The thesis will embody the result of the study of a special chemical problem in the laboratory. It will partake of the nature of original investigation. Open only to seniors. Hours arranged. *One to three credit hours.* THE CHEMICAL STAFF

51; 52. ORGANIC CHEMISTRY.—An introductory course dealing with aliphatic and aromatic compounds. Prerequisite, Course 32 or at least C grades in Courses 1, 2. (Engineering Physics students may take the fall-semester course under the heading of 51a without laboratory for *three credit hours.*) Classroom, *three hours a week;* laboratory, *four hours a week.* Two breakage cards. *Five credit hours.* MR. BRAUTLECHT

54. Advanced Inorganic Chemistry.—Advanced theoretical and descriptive inorganic chemistry emphasizing periodic relationships. Prerequisite, Chemistry 71. Given in alternate years. Lectures and recitations, *two hours a week. Two credit hours.* Mr. Osborn

55. Contemporary Chemistry.—A study of the contemporary personalities and contributions in the field of chemistry. Prerequisite, Courses 52 and 72. Lecture, *one hour a week. One credit hour.* Mr. Brann

56. Structure of Matter.—Recent developments in the field of atomic and molecular structure; isotopes; radioactivity; etc. Prerequisite, Course 71. Given in alternate years. Not given in 1939-40. Lectures and recitations, *two hours a week. Two credit hours.* Mr. Brann

57 (58). Principles of Metallography.—The microstructure of ferrous and non-ferrous metals and alloys with emphasis on the principles of equilibrium and physical chemistry as related to their properties. Open only to exceptional students. Prerequisite, Course 72. Lectures and recitations, *two hours a week. Two credit hours.* Mr. Bradt

61. Technical Analysis.—The analysis of certain technical products of particular interest to chemical engineers. Prerequisite, Course 41. Classroom, *one hour a week;* laboratory, *eight hours a week.* Two breakage cards. *Four credit hours.* Mr. Bogan

63. Advanced Quantitative Analysis.—A continuation of Course 41, taking up some of the more difficult volumetric and gravimetric methods. Designed particularly for chemists. Prerequisite, Course 41. Classroom, *one hour a week;* laboratory, *eight hours a week.* Two breakage cards. *Four credit hours.* Mr. Bogan

71; 72. Physical Chemistry.—This is a course in the detailed study of fundamental principles of chemistry and the application of them to various fields. Lecture, recitations, and laboratory. Prerequisites, Course 41 and Physics 1b, 2b. Calculus is very desirable. (Engineering Physics students may take the spring semester course under the heading of 72a without laboratory for *three credit hours.*) Classroom, *three hours a week;* laboratory, *four hours a week.* One breakage card. *Five credit hours.*

Mr. Brann, Mr. Martin

73; 74. Chemical Microscopy.—The technique of handling and analyzing samples of very small size. Chemical and physical changes, crystalline form, density and refractive index observed under the microscope. Unknowns, permanent slides, microphotographs, micromeasurements, etc. Open only to exceptional students. Prerequisite, Course 41. Laboratory (including recitations), *six hours a week.* One breakage card. *Two credit hours.*

Mr. Otto

84. METALLURGY.—A descriptive course dealing with ferrous and non-ferrous metals and alloys. Prerequisite, Course 1, 2. Chemistry and Chemical Engineering students taking this course will be expected to work advanced problems and must offer as prerequisites, Course 71, 72. Classroom, *three hours a week. Three credit hours.* MR. MARTIN

86. JOURNAL SEMINAR.—A study of chemical literature and chemical methods. Prerequisite, Course 52 and senior standing. Classroom, *two hours a week. Two credit hours.* MR. NOLAN

89. ORGANIC PREPARATIONS.—The preparation of a number of organic compounds. Objective of the course is the utilization of varying types of techniques and procedures as illustrated by a selected group of organic preparations. Prerequisite, Course 51 and 52. Laboratory, *six hours a week. Two credit hours.* MR. BRADT

90. ORGANIC ANALYSIS.—Identification of pure organic compounds and the technique of preparing derivatives and manipulating small quantities of substances. Courses 41, 51, and 52 are prerequisites. Laboratory, *four hours a week. Two credit hours.* MR. BRADT

91. 92. ADVANCED ORGANIC CHEMISTRY.—A course involving the general and also special topics of organic chemistry. Prerequisite, Course 51, 52. Recitation, *three hours a week. Three credit hours.* MR. BRADT

95. THERMODYNAMICS.—A brief study of the laws of thermodynamics as applied to chemical problems. Prerequisite, Course 71, 72. Classroom, *three hours a week. Three credit hours.* MR. BRANN

96. ELECTROCHEMISTRY.—A brief review of the theory followed by a study of the more important industrial applications. Prerequisite, Course 71, 72. Classroom, *three hours a week. Three credit hours.* MR. BRANN

97. 98. METHODS OF TEACHING CHEMISTRY.—A course for prospective teachers of chemistry, which includes administration, supervision, costs; laboratory arrangement, equipment, maintenance and supplies; preparation of solutions, demonstrations, lesson plans, testing programs; texts, laboratory manuals; grading and scoring; bibliography. Text, problems, and journal assignments. For juniors, seniors, and graduate students. Prerequisite, Course 1, 2, or the equivalent. Classroom, *two hours a week. Two credit hours.* MR. BRAUTLECHT

101. 102. INVESTIGATIONS AND THESIS IN ORGANIC CHEMISTRY.—Open only to graduate students. *Time and credit, arranged*

THE CHEMISTRY STAFF

103. 104. Investigations and Thesis in Physical Chemistry.—Open only to graduate students. *Time and credit, arranged.*

The Chemistry Staff

105. 106. Investigations and Thesis in Analytical Chemistry.—Open only to graduate students. *Time and credit, arranged.*

The Chemistry Staff

107. 108. Investigations and Thesis in Inorganic Chemistry.—Open only to graduate students. *Time and credit, arranged.*

The Chemistry Staff

Courses in Chemical Engineering

33. Elementary Stoichiometry.—This course includes the application of chemical analyses to material and energy balances as applied to various operations or pieces of equipment, such as the combustion of fuels, crystallization, a rotary kiln, a sulfur burner, etc. Prerequisites, Chemistry 1, 2. Lecture and recitation, *three hours a week. Three credit hours.*

Mr. Nolan

49. 50. Thesis.—The thesis will embody the result of the study of a special chemical engineering problem in the laboratory. It will partake of the nature of original investigation. Open only to seniors. Hours arranged. *One to three credit hours.* The Chemical Engineering Staff

75; 76. Elements of Chemical Engineering.—A study of the application of unit operations to engineering practice such as heat transfer, evaporation, and distillation. Prerequisites, Course 33 and Chemistry 71. Classroom, *Three hours a week. Three credit hours.* Mr. Caulfield

77. Inorganic Technology.—This is a partially descriptive course with considerabe emphasis on the quantitative application of principles of unit operations and physical chemistry to such processes as the sulfuric, nitric, caustic, fertilizer, starch, and paper industries. Prerequisites, Course 76 and Chemistry 72. Lecture and recitation, *three hours a week. Three credit hours.* Mr. Nolan

78. Organic Technology.—This course is similar to Course 77 except that more emphasis is placed on processes common to several organic industries such as nitration, sulfonation, saponification, hydrogenation, etc. Prerequisites, Course 76, Chemistry 52 and 72. Lecture and recitation, *three hours a week. Three credit hours.* Mr. Brautlecht

81. 82. Chemical Engineering Laboratory.—The practice in unit operations and processes, particularly those emphasized in Courses 75, 76.

Formal reports are an essential part. Prerequisites, Course 33 and Chemistry 71. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.* MR. JENNESS

84. UNIT PROCESSES.—This course includes the quantitative application of unit operations as actually used in process work, such as the drying of paper on a paper machine, the absorption of sulfur dioxide in a limestone tower, and heat and material transfer in a digester. Most of the equipment utilized is special equipment available in the Pulp and Paper division. Prerequisite, Course 81. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.* MR. CAULFIELD AND STAFF

87. CHEMICAL ENGINEERING PRACTICE.—The course consists of group investigations of the operation of equipment in neighboring industrial plants. the major portion of time is spent at the plant with additional literature and experimental work at the University. The course is open only to Chemical Engineering students in the senior or graduate years. Time arranged. *One to three credit hours.* MR. NOLAN

88. CHEM.CAL ENGINEERING PRACTICE.—This course is similar to Course 87 except that problems investigated will be more of a research nature involving some design and economic investigation. Prerequisite, B grade in Course 87. Laboratory, *nine hours a week. Three credit hours.* MR. NOLAN

109. 110. INVESTIGATIONS AND THESIS IN CHEMICAL ENGINEERING.—Open only to graduate students. *Time and credit, arranged.* THE CHEMICAL ENGINEERING STAFF

175. CHEMICAL ENGINEERING ECONOMIC BALANCE.—This course includes the application of economics to chemical engineering unit operations, in so far as it determines the optimum size and nature of process equipment. For instance, the most economic surface area of a heat interchanger for heating feed water with exhaust furnace gas is controlled by first cost, power costs, desired terminal temperatures, etc. Prerequisite, Course 82. Classroom, *three hours a week. Three credit hours.* THE CHEMICAL ENGINEERING STAFF

176. CHEMICAL ENGINEERING PLANT DESIGN.—At the start of this course each student will be assigned some chemical engineering process for which he will be required to design a plant. This will include selection of equipment, plant layout, and cost analysis. Prerequisite, Course 175. Classroom, *three hours a week. Three credit hours.* THE CHEMICAL ENGINEERING STAFF

Equipment obtained and receipted for by a student and not returned at the end of a course in good condition, as well as a few non-returnable supplies and a few special chemicals, will be charged to the student at cost. The supply room will be open during all laboratory periods. Breakage cards may be obtained only at the Treasurer's office, and all students taking chemical laboratory courses are required to have one or more. The unused balance is redeemable at the Treasurer's office, after obtaining clearance at the chemistry storeroom.

For courses in biochemistry, see the description of courses given by the Department of Bacteriology and Biochemistry.

For requirements leading to the degree of Bachelor of Arts in Chemistry, see section devoted to the College of Arts and Sciences.

Courses in Pulp and Paper Technology

PROFESSOR BRAY; ASSISTANT PROFESSOR CAULFIELD

49. 50. THESIS.—The thesis will embody the result of the study of a special problem in the laboratory. It will partake of the nature of original investigations. Hours arranged. *One to three credit hours.*

MR. BRAY, MR. CAULFIELD

65. PULP TECHNOLOGY.—A lecture course on the manufacture of the various kinds of wood pulps and the chemistry involved in present-day pulp making. Prerequisites, Chemistry 1, 2, 32, and 41. Classroom, *three hours a week. Three credit hours.* MR. BRAY

66. PAPER TECHNOLOGY.—A lecture course on the processes of manufacturing paper. Prerequisite, Course 65. Classroom, *three hours a week. Three credit hours.* MR. BRAY

67. PULP MANUFACTURE.—Laboratory work. Unit-process work on semi-commercial scale production of various kinds of wood pulps, analysis of pulp-making raw materials, etc. Prerequisites, Chemistry 1, 2, 32, 41, and Pulp and Paper 65. Laboratory, *eight hours a week for first nine weeks.* One breakage card required. *Two credit hours.* MR. BRAY, MR. CAULFIELD

68. PAPER MANUFACTURE.—A laboratory course, unit process work, in which papers of various kinds are made on semi-commercial equipment including Jordan and cylinder paper machine. Prerequisite, Course 66. Laboratory, *four hours a week.* One breakage card required. *Two credit hours.* MR. BRAY, MR. CAULFIELD

82. Pulp Coloring and Bleaching.—A laboratory course involving an examination and application of the various classes of dye stuffs, and the methods of bleaching various kinds of pulps. Prerequisites, Courses 65 and 66. Laboratory, *four hours a week.* One breakage card required. *Two credit hours.* Mr. Bray, Mr. Caulfield

83. Chemical Engineering of Pulp and Paper Manufacture.—Application of the theory of the unit operations of chemical engineering to the processes of pulp and paper manufacture, that is, transfer of fluids, heat and material balances, absorption, drying, recovery of chemicals, etc. Recitation and lecture, *three hours a week. Three credit hours.*

Mr. Caulfield

(85); 86. Cellulose.—A laboratory course dealing with the characteristics and derivatives of various kinds of pulps (cellulose). Prerequisite, Chemistry 1, 2, 32, 41, and Pulp and Paper 65. Laboratory, *four hours a week.* One breakage card required. *Two credit hours.* Mr. Caulfield

87. Paper Testing and Analysis.—A laboratory course involving physical, microscopical, and chemical testing of various kinds of papers. Prerequisites, Chemistry 32, 41, and Pulp and Paper 65 and 66. Laboratory, *four hours a week.* One breakage card required. *Two credit hours.*

Mr. Bray, Mr. Caulfield

88.-(89). Pulp and Paper Practice. —The course consists of group investigations of the operation of equipment in neighboring industrial plants. The course is open to qualified Pulp and Paper students in the senior or graduate year. (This is the same course as ChE 87 and 88.) *Time arranged. One to three credit hours.* Mr. Nolan

105. 106. Investigations and Graduate Thesis in Pulp and Paper Technology. Mr. Bray, Mr. Caulfield

Equipment obtained and receipted for by a student and not returnable at the end of a course, as well as a few non-returnable supplies and a few special chemicals, will be charged to the student at cost. The supply room will be open during all laboratory periods. Breakage cards may be obtained only at the Treasurer's office and all students taking laboratory courses are required to have one. The unused balance is redeemable at the Treasurer's office, after obtaining clearance at the chemistry storeroom.

For Pulp and Paper Technology courses in the Summer Session, see the Summer Session Bulletin.

CIVIL ENGINEERING

PROFESSORS EVANS, SPRAGUE, AND LEAVITT; ASSOCIATE PROFESSOR LYON; MR. TREFETHEN; MR. STEPHENSON; MR. BENNETT; MR. LENDO

1. PLANE SURVEYING.—Recitations and lectures covering the general theory of plane surveying and plotting. A study of surveying instruments, their adjustments and use, followed by a study of the methods commonly used for surveying and plotting. Classroom, *two hours a week. Two credit hours.* MR. STEPHENSON

2. PLANE SURVEYING.—Recitations and lectures covering surveying instruments and their use, followed by a discussion of the various methods commonly used for Plane Surveying. Prerequisite, Mathematics 1. Classroom, *two hours a week for twelve weeks;* field work, *three hours a week* and classroom *one hour a week for six weeks. Two credit hours.*
MR. STEPHENSON

3. FIELD WORK AND PLOTTING.—This course consists of practice in the use of the tape, compass, transit, and level, followed by practice in the common methods of map drawing. Field and drawing room, *nine hours a week. Three credit hours.* MR. STEPHENSON, MR. LENDO

4. SURVEYING.—The historical background of surveying, the legal principles involved when surveys and resurveys are made, and the common methods employed will be emphasized. Not open to students who have had other surveying courses. Classroom, *two hours a week;* field and office, *three hours a week. Three credit hours.* MR. STEPHENSON

6. LAND SURVEYING.—This course is designed to familiarize the student with the methods employed by the General Land Office for laying out public lands and with such other methods as may have been used by the various states. Prerequisites, Courses 1 and 3. Classroom, *two hours a week;* field work, *nine hours a week during the last six weeks. Three credit hours.*
MR. STEPHENSON, MR. LENDO

8. CONSTRUCTION SURVEYING.—A course covering the various problems which the man surveying for various types of construction encounters. The legal aspect of surveying, methods employed, and the necessary computations are studied. Prerequisites, Courses 1 and 3. Classroom, *two hours a week during first twelve weeks;* field work, *six hours a week during the last six weeks. Two credit hours.* MR. LYON, MR. LENDO

10. CURVES AND EARTHWORK.—A course of recitations and lectures investigating the geometry of simple, compound, and reverse circular curves,

transition curves, vertical curves, and earthwork. Prerequisites, Courses 1 and 3. Classroom, *three hours a week. Three credit hours.* MR. LYON

12. ECONOMIC GEOGRAPHY.—Deals with the principles of geography, especially applied to the common economic products, treating their distribution, characteristics, and uses. Given in 1938-39 and alternate years. Classroom, *three hours a week. Three credit hours.* MR. TREFETHEN

13. PHYSICAL GEOLOGY.—Introduction to general dynamical geology; it covers the materials, agents, and processes of geology. Classroom, *three hours a week. Three credit hours.* MR. TREFETHEN

14. INTRODUCTION TO REGIONAL GEOGRAPHY.—A survey course designed to give a general understanding of the natural and cultural aspects of the major geographic regions of the world. Classroom, *three hours a week. Three credit hours.* MR. TREFETHEN

16. GEOLOGY.—Introduction to geological materials, agents, and processes of particular interest to the engineer. Classroom, *two hours a week. Two credit hours.* MR. TREFETHEN

17. ECONOMIC GEOLOGY.—Introduction to ore deposits; their characteristics, distribution, production, and uses of both metals and non-metals. Classroom, *two hours a week. Two credit hours.* MR. TREFETHEN

18. HISTORICAL GEOLOGY.—A review of the earth's history; its past land distribution, mountain revolutions, rock formations, climates and living forms. Classroom, *three hours a week. Three credit hours.*
MR. TREFETHEN

19. ADVANCED GENERAL GEOLOGY.—A study of the common rocks and minerals and geologic processes. Designed for students who are considering further work in geology and students who expect to teach science in the high schools. Prerequisite, Course 13 or Course 16. Classroom, *two hours a week;* laboratory, *two hours a week. Three credit hours.*
MR. TREFETHEN

20. STRUCTURAL AND HIGHWAY MATERIALS.—Laboratory and recitations covering the methods of testing, characteristics of, and specifications for the materials commonly used for structural and highway purposes. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.*
MR. LEAVITT, MR. SPRAGUE, MR. STEPHENSON, MR. LENDO

23. ADVANCED SURVEYING.—This course consists of lectures, readings, and recitations on the theory and practice of base-line measurement, triangulation, precise leveling, topographical surveying, hydrographic surveying, the

use of the plane table and sextant, the theory and application of least squares, and map projection. Prerequisites, Courses 1 and 3. Lecture, recitation, and problems, *one hour a week. One credit hour.* MR. LYON

25. ENGINEERING GEOLOGY.—Characteristics of building stones and other earth features with which the civil engineer deals. Prerequisite, Course 16. Classroom, *two hours a week;* laboratory, *three hours a week. Three credit hours.* MR. TREFETHEN

26. HYDRAULICS.—Fundamental data; hydrostatics; theoretical hydraulics; instruments and observations; theoretical and actual flow through orifices, weirs, tubes, pipes, and conduits; dynamic pressure of water. Prerequisite, Mechanics 51. Classroom, *three hours a week. Three credit hours.* MR. LYON

28. SOIL TESTING.—A laboratory course in soil testing as applied to soil mechanics. The principles of the tests and interpretation of test results are explained and discussed in the classroom. Prerequisite, Mechanics 51. Recitation, *one hour a week;* laboraory, *three hours a week. Two credit hours.* MR. BENNETT

29. HIGHWAY CONSTRUCTION.—The construction and maintenance of city pavements and country roads under various conditions of traffic, climate, soil, etc. Prerequisites, Courses 1 and 10. Recitation, *two hours a week. Two credit hours.* MR. LEAVITT

33. SANITARY ENGINEERING AND WATER SUPPLY.—An introductory course outlining the engineering problems which are involved in designing and operating municipal water supply, and sewage disposal systems. Classroom, *two hours a week,* laboratory, *three hours a week. Three credit hours.* MR. SPRAGUE

35. HYDRAULICS.—A short course which includes the main principles given in Course 26. Given to students in the Departments of Mechanical and Electrical Engineering. Prerequisite, Mechanics 51. Classroom, *two hours a week. Two credit hours.* MR. LYON

49. 50. THESIS WORK.—The study of and report upon some original investigation or design. See regulations regarding degrees. *Time to be arranged. Two or three credit hours.* MR. EVANS AND STAFF

51. HYDRAULIC ENGINEERING, OFFICE WORK.—From notes previously taken in the field, rating curves and vertical velocity curves are plotted and studied and discharge measurements are computed; also problems in hydrology, water storage, and water power are studied. Prerequisites, Courses 26 and 51s. Course 55 must be concurrent. Drawing room, *four hours a week. Two credit hours.* MR. LYON

52. Theory and Design of Steel Structures.—This course involves the determination of stresses and strain in beams, girders, and trusses under the usual systems of loading. Students are required to make a complete design of several types of structures. Prerequisite, Mechanics 51. *Five hours a week. Five credit hours.* Mr. Evans

53. Hydraulic Engineering, Office Work.—A course similar to but shorter than Course 51. Prerequisites, Courses 26 and 51s. Drawing room, *two hours a week. One credit hour.* Mr. Lyon

55. Hydrology.—A study of stream-flow as applied to water-power development; rainfall; evaporation; run-off; methods of obtaining data with a study of their use. Prerequisite, Course 26. Classroom, *two hours a week. Two credit hours.* Mr. Lyon

56. Hydraulic Engineering.—A continuation of Courses 51 and 55. The development and utilization of water power; the modern turbine; inspection of hydro-electric plants. Drawing room, *four hours a week. Two credit hours.* Mr. Lyon

57. Concrete Structures and Foundations.—This course covers the design and construction of plain and reinforced concrete structures with due consideration for preparing the foundation to receive such structures. Prerequisite, Mechanics 51. *Five hours a week. Five credit hours.* Mr. Evans

59. Drafting.—This course consists of detailing the structures designed in Course 52. Drawing room, *nine hours a week. Three credit hours.* Mr. Sprague

60. Drafting.—The structures designed in Course 52 are detailed in this course. *Six hours a week. Two credit hours.* Mr. Sprague

61. Foundations.—Recitations, lectures, problems, and outside readings dealing with ordinary and special foundation problems. Classroom, *two hours a week. Two credit hours.* Mr. Bennett

62. Soil Mechanics.—A study of the fundamental principles underlying Soil Mechanics with application to practical foundation problems. Prerequisite, Mechanics 51 or 53, also Course 28. Classroom, *three hours a week. Three credit hours.* Mr. Bennett

63. Highway Economics.—State highway and municipal highway management as they affect organization, administration, and finance of streets and highways; economic factors of highway location, design and operation; traffic and operation expenses. Prerequisites, Courses 29 and 11s. *Three hours a week. Three credit hours.* Mr. Leavitt

68. Highway Design.—Drawing room study of highway location and relocation, including plans of proposed improvement and construction of

about five miles of highway with detailed estimates and specifications for the same. Also design of street intersections. Prerequisite, Course 63. Drawing room, *four hours a week. Two credit hours.* MR. LEAVITT

71. SANITARY ENGINEERING.—The theory of design of water-treatment plants and sewage disposal works which was studied in previous courses is applied to practical municipal problems. Prerequisite, Course 33. Classroom, *two hours a week. Two credit hours.* MR. SPRAGUE

72. HIGHWAY ENGINEERING.—An advanced course of lectures and recitations on various highway problems; general survey of higher types of pavements; city planning; specifications; cost keeping; maintenance and repair work as discussed in engineering periodicals. Prerequisite, Course 63. Classroom, *two hours a week. Two credit hours.* MR. LEAVITT

74. SANITARY ENGINEERING.—Lectures and recitations dealing with municipal and rural sanitation. Sanitation of milk and other foods; control of mosquitoes, flies, and rodents. Prerequisite, Course 33. Classroom, *two hours a week. Two credit hours.* MR. SPRAGUE

79. STRUCTURAL GEOLOGY.—Principles and characteristics of earth structures. Prerequisite, Course 25. Given in 1938-39 and alternate years. Classroom, *two hours a week. Two credit hours.* MR. TREFETHEN

82. ADVANCED ENGINEERING GEOLOGY.—Application of geology to engineering construction. Prerequisite, Course 25. Classroom, *three hours a week. Three credit hours.* MR. TREFETHEN

102. THEORY OF STRUCTURES.—This course involves the determination of stresses in statically indeterminate structures. It is a continuation of Course 52 and is open only to those men who have passed that course or its equivalent satisfactorily. Classroom, *three hours a week. Three credit hours.* MR. EVANS

Courses To Be Offered at Summer Camp

7s. HIGHWAYS AND RAILROADS.—Preliminary and location surveys for railways and highways, particularly forest highways. Grades are established and grade stakes set. The preparation of maps from notes previously taken and calculations of earthwork. Trail location and construction. Prerequisites, Courses 1 and 3. *Two credit hours.*

11s. HIGHWAY AND RAILROAD SURVEYS.—This course consists of making preliminary and location surveys for a highway and a railroad, each approximately two miles in length, establishing grades and setting grade stakes.

The notes are plotted and calculations are made as to the amount of earthwork. Prerequisites, Courses 1, 3, and 9. *Three credit hours.*

24s. Geodetic and Topographic Surveying.—This field work consists of making topographic surveys with the transit and plane table, including triangulation, the use of sextant, trigonometric levelling and the traverse plane table. The drafting room work consists of making computations and drawings necessary to interpret the results of the field observations. Prerequisites, Courses 1, 3, and 23. *Two credit hours.*

51s. Hydrographic Surveying.—(a) *Stream Gauging.* This course is planned to instruct the student in the principles underlying the measurement of flow of water in open channels. (b) *Soundings.* This part of the course takes up the methods of making soundings and practices the use of surveying instruments for locating them. Prerequisite, Course 26. *One credit hour.*

ELECTRICAL ENGINEERING

Professors Barrows, Hill, Creamer, and Cloke; Assistant Professors Roberts and Crabtree; Mr. Bliss

1; 2. Elements of Electrical Engineering.—Fundamental laws and principles of electricity; series and parallel circuits; the magnetic circuit; the dielectric circuit; conduction through electrolytes and gases; thermionics; instrument calibration; electrical measurements. Recitations and problems. Prerequisite, Physics 1, 2 and Mathematics 1, 3. Classroom, *two hours a week;* computation, *three hours a week;* laboratory, *two hours a week. Four credit hours.* Mr. Barrows, Mr. Creamer, Mr. Bliss

1p; 2p. Elements of Electrical Engineering.—Same as Course 1, 2 except that laboratory is omitted. (For students majoring in Engineering Physics who do not wish to take laboratory.) Classroom, *two hours a week;* computation, *three hours a week. Three credit hours.*

5a (6a). Household Equipment.—Physical principle, use, and selection of various household appliances. Elementary principles of heat and electricity, household heating and ventilating systems, laundry procedure, refrigerators, all types of kitchen ranges. and all small electrical appliances are considered. Course required of senior Home Economics students. Lecture, *one hour a week;* recitation, *one hour a week;* laboratory, *two hours a week. Three credit hours.* Mr. Bliss

9 (10). Radio Operating.—Instruction and practice in transmission and reception of international code signals. Study of the regulations of the Federal Communications Commission. Operation of W1YA. Offered for credit to majors in Electrical Engineering only. Laboratory, *one and one-half hours a week. One-half credit hour.* Mr. Roberts

13. Electronics.—The theory of electron tubes; hard vacuum diodes, triodes, tetrodes, pentodes, photocells, etc.; gaseous tubes utilizing neon, argon, and mercury vapor; arcs, corona, and other discharges; tube detectors, amplifiers, oscillators, and associated circuits; functioning of the dynatron and magnetron; crystal and magneto-striction oscillators; electrical measurements; industrial applications. Prerequisite, Course 2. Course 15 is required concurrently. Classroom, *two hours a week;* laboratory, *three hours a week. Three credit hours.* Mr. Crabtree

15; 16. Electric Circuits and Machinery.—Fundamental theory of sinusoidal alternating currents, including representation by vectors and solutions by trigonometric and algebraic methods. Underlying principles and circuit problems common to all types of electrical apparatus; design and performance of direct-current machinery. Theory of polyphase alternating-current systems, non-sinusoidal wave forms, and electrical transmission. Introduction to the analysis of transient phenomena. Lectures, recitations, and problems. Prerequisite, Course 2. Fall semester: classroom, *three hours a week. Three credit hours.* Spring semester: classroom, *three hours a week;* computation, *three hours a week. Four credit hours.* Mr. Hill

17; 18. Electrical Laboratory.—Electrical measurements; operation and testing of direct-current generators and motors. Introductory experiments of alternating-current circuits and machines. Application of the work of Courses 1, 2, 15, and 16. Prerequisite, Course 2; Courses 15 and 16 are concurrent. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* Mr. Roberts, Mr. Crabtree

22. Telephone Communication.—Characteristics of speech; the hearing mechanism; mechanical and electrical characteristics of telephone apparatus; the subscriber's set; common battery and local battery circuits; dial systems; repeaters; traffic studies. Lectures and recitations. Prerequisite, Course 15. Course 24 is required concurrently. Classroom, *three hours a week. Three credit hours.* Mr. Creamer

24. Telephone Laboratory.—Microphonic efficiency of telephone apparatus; measurements of articulation and audition; local and common battery systems; phantom and composite circuits; repeaters; transmission testing. Course 22 is required concurrently. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Bliss

30 (35). Direct Current Machinery.—Electrical principles and applications; the production, distribution, and utilization of power from the standpoint of the civil, mechanical, and chemical engineer. Recitations and problems. Classroom, *two hours a week. Two credit hours.*

Mr. Roberts, Mr. Crabtree

31 (36). Alternating Currents.—Alternating current measurements and calculations; operation of generators and motors. Lectures, recitations, and problems. Prerequisite, Course 30 or 35. Classroom, *two hours a week. Two credit hours.* Mr. Roberts, Mr. Crabtree, Mr. Bliss

33 (38). Electrical Laboratory.—This course is based on Courses 30, 31, 35, and 36. Operations of direct-current and alternating-current generators and motors; electrical power measurements. Prerequisite, Course 30 or 35; Course 31 or 36 concurrent. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Roberts, Mr. Crabtree, Mr. Bliss

49. 50. Thesis Work.—The study of and report upon some original investigation or design. *Time to be arranged.* See regulations regarding degrees. *One to three credit hours.* Mr. Cloke, Mr. Hill, Mr. Creamer

Inspection Trip.—About a week's trip visiting some of the electrical and industrial plants of New England. Mr. Barrows

51. Alternating Current Apparatus.—Continuation of Course 16. Theory, construction, and operating characteristics of alternating-current apparatus and machinery. Polyphase apparatus; generation, distribution, and utilization of polyphase power. Lectures, recitations, and problems. Prerequisite, Course 16. Classroom, *three hours a week;* computation, *four hours a week. Five credit hours.* Mr. Barrows

56. Electrical Power Plants.—Electrical equipment of power plants, methods of control, switching, protection, lightning arresters; arrangement of station and substation machinery, apparatus, and switchboards. Lectures and recitations. Prerequisites, Courses 15, 16, and 51. Classroom, *three hours a week. Three credit hours.* Mr. Barrows

58. Electrical Power Transmission.—Theory, design, and calculation of power-transmission systems. Problems of inductive interference, insulation, protection, stability, and control. Lectures, recitations, and problems. Prerequisites, Courses 16 and 51. Classroom, *two hours a week;* supervised computation, *three hours a week. Three credit hours.* Mr. Hill

60. Advanced Electrical Machinery.—Analysis of windings and magnetic circuits of electric power apparatus. Advanced problems on flux distribution, commutation, heat paths, air flow, and mechanical stresses. De-

sign of alternating-current machinery. Predetermination of performance characteristics. Lectures and problems. Prerequisite, Course 51. Classroom, *three hours a week. Three credit hours.* MR. HILL

61 (62). ILLUMINATING ENGINEERING.—Different types of lamps; light, photometry, illumination calculations, and problems of interior and exterior illumination. Lectures, recitations, and problems. Classroom, *three hours a week. Three credit hours.* MR. BARROWS

63. ELECTRICAL TRANSPORTATION.—Mechanics of vehicle movement; estimates of power and energy requirements of trains and other transportation units. Engineering and economic principles governing the selection and design of electrical equipment for railways, buses, elevators, and ships. Lectures, recitations, and problems. Prerequisite, Course 15, 16. Course 51 is concurrent. Classroom, *three hours a week. Three credit hours.* MR. HILL

75; 76. ELECTRICAL LABORATORY.—Alternating-current instruments and measurements; experimental work on single-phase circuits and polyphase systems. Operation and testing of alternating-current generators, motors, transformers, and converters. Prerequisites, Courses 15, 16, 17, and 18; Course 51 is concurrent. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* MR. HILL, MR. ROBERTS

81. COMMUNICATION ENGINEERING.—Network theory; equivalent circuits; filters; equalizers; carrier-current systems. Lectures and problems. Prerequisite, Course 22. Computation, *six hours a week. Two credit hours.* MR. CREAMER

83. COMMUNICATION LABORATORY.—Advanced measurements on communication apparatus; repeaters; carrier-current systems; audio-frequency amplifiers; filters; transformers; loud speakers and microphones. Prerequisite, Course 22. Course 81 is required concurrently. Laboratory, *three hours a week. One and one-half credit hours.* MR. CRABTREE

84. TELEPHONE TRANSMISSION.—Application of hyperbolic functions to transmission line problems; transmission of speech over cable and open wire circuits; loaded lines; design of artificial lines. Lectures and problems. Prerequisite, Course 81. Computation, *six hours a week. Two credit hours.* MR. CRABTREE

85; 86. RADIO ENGINEERING.—Detailed study of inductance coils, condensers, and resistors for radio frequencies; vacuum-tube theory; extended analysis of oscillatory circuits and methods of excitation; radiation and transmission phenomena; comparisons of methods of transmission and reception; theory of modulation; radio measurements. Lectures, recitations, and design problems. Prerequisite, Course 22. Fall semester: classroom, *one hour a*

week; computation, *two hours a week. Two credit hours.* Spring semester: classroom, *two hours a week;* seminar or computation, *two hours a week. Three credit hours.* MR. CREAMER

87. ENGINEERING ACOUSTICS.—This course, which is closely correlated with Courses 81, 85, and 86, deals with studio and theater acoustics, and the dynamical systems of microphones, receivers, and loud speakers. Lectures, recitations, and problems. Prerequisite, Course 22. Classroom, *two hours a week. Two credit hours.* MR. CREAMER

88. RADIO LABORATORY.—Use of wave-meters; radio-frequency amplifiers; tests of tube transmitters and receivers; continuous wave and radiophone transmission at various frequencies; radio directionals; field strength measurements. Course 86 is required concurrently. Laboratory, *three hours a week. One and one-half credit hours.* MR. CREAMER

91; 92. THEORY OF ELECTRICITY.—A study of the more advanced mathematical and physical theories of electricity with reference to their engineering applications. Wave propagation, radiation, gaseous conduction, and the analysis of transient phnomena by the methods of Heaviside's operational calculus. Problems, conferences, and seminar. Either or both semesters. *Two credit hours.* MR. CLOKE, MR. HILL

156. ADVANCED ELECTRICAL POWER PLANTS.—Study of the latest designs and methods of central station practice. Location, parallel operation, super-power practice, and economics. Lectures, studies, and problems. Prerequisites, Courses 51, 56, and 76. Classroom, *two hours a week. Two credit hours.* MR. BARROWS

157; 158. ADVANCED ELECTRICAL POWER TRANSMISSION.—A detailed study of the advanced theory of electric power circuits in the normal steady state and under transient and unbalanced conditions. Analysis of the performance of transmission systems, distribution networks, and connected apparatus. Engineering and economic problems of design, construction, and operation. Lectures, analytical studies, and problems. Prerequisite, Course 58. Classroom, *two or three hours a week. Two or three credit hours.* MR. HILL

165; 166. ADVANCED THEORY OF ELECTRICAL MACHINERY.—Analytical study of electrical machinery with emphasis on methods useful in research and development. Analysis of behavior in transient states and under abnormal condition of operation. Lectures, problems, seminar papers, and reviews. Prerequisite, Course 60. Course 175 is concurrent. Classroom, *two or three hours a week. Two or three credit hours.* MR. HILL

175. Electrical Laboratory.—Advanced tests of electrical machines and circuits as related to design and development. Performance studies involving the use of the oscillograph. Prerequisites, Courses 51, 60, and 76. Course 165 is concurrent. Classroom, *one hour a week;* laboratory, *three hours a week. Two and one-half credit hours.* Mr. Barrows

185. Communication Networks.—Advanced study of passive networks, including filters and attenuation equalizers; transformer and transition losses; high-quality circuits used as an adjunct to radio broadcasting; advances in communication from study of current technical literature. Lectures, reports, and problems. For graduate students who have specialized in electrical communication. Classroom, *two hours a week. Two credit hours.* Mr. Creamer

186. High Frequency Phenomena.—Advanced analytical treatment of topics considered in Course 85, 86 including circuits, apparatus, and radiation phenomena. For graduate students having a knowledge of differential equations and of vector analysis. Prerequisite, Courses 85 and 86. Classroom, *two hours a week. Two credit hours.* Mr. Creamer

187. Radio Seminar.—A thorough, critical study of a limited number of important current developments in radio engineering. For graduate students who have specialized in electrical communication. Prerequisite, Course 85, 86. Classroom, *two hours a week. Two credit hours.* Mr. Creamer

188. Circuits Laboratory.—Experimental work based on theory treated in Course 185; oscillographic study of speech sounds and modulation; detection and elimination of speech distortion in amplifiers. Prerequisite, Course 185. Laboratory, *three hours a week. One and one-half credit hours.* Mr. Creamer

ENGINEERING DRAFTING

Professor Kent; Assistant Professor Sawyer; Mr. McNeary

1. Fundamentals of Drafting.—Instruction and practice in technical sketching and lettering, in the care of drawing instruments, and their use in elementary problems involving right lines, circles, irregular curves, and orthographic projections. Drawing room, *four hours a week. Two credit hours.* Mr. Kent, Mr. Sawyer, Mr. McNeary

2. Elementary Machine Drafting.—A continued study of the methods of orthographic projection, isometric projection, and oblique projection, accompanied by instruction and practice in the making of working

drawings and tracings. Drawing room, *four hours a week. Two credit hours.*
MR. KENT, MR. SAWYER, MR. MCNEARY

2a. DRAFTING.—Continuation of orthographic projections, with isometric and perspective projections, topographical symbols and their application, map reproduction and enlarging, and blueprinting. Drafting room, *four hours a week. Two credit hours.* MR. SAWYER, MR. MCNEARY

3. DESCRIPTIVE GEOMETRY.—The elementary principles and problems of descriptive geometry, including intersections and developments. Recitation and drawing room, *six hours a week. Two credit hours.*
MR. KENT, MR. SAWYER, MR. MCNEARY

4. ADVANCED MACHINE DRAFTING.—A continued study of the making of working drawings of simple machines, together with instruction and practice in blueprinting. Drawing room, *six hours a week. Two credit hours.*
MR. KENT, MR. SAWYER, MR. MCNEARY

9; 10. AGRICULTURAL DRAFTING.—A course designed especially for students in Agriculture and for others who are not engineers. It combines the fundamental principles of Courses 1 and 2. Drawing room, *four hours a week. Two credit hours.* MR. KENT

54a. SHADES AND SHADOWS.—A study of the principles of the casting of shadows on and by architectural objects. A half-semester course. Prerequisite, Course 1. Drafting room, *four hours a week. One credit hour.*
MR. KENT

54b. PERSPECTIVE.—A study of the principles of architectural perspective and the making of the same. A half-semester course. Prerequisite, Course 1. Drafting room, *four hours a week. One credit hour.* MR. KENT

ENGINEERING PHYSICS

See course descriptions under Physics Department, College of Arts and Sciences, page 215.

LECTURE COURSES

Gc 5. ORIENTATION.—A course of lectures by members of the staff of the College and other faculty members for Technology freshmen. Designed to better acquaint them with the different fields of study and the opportunities in these fields. Given Wednesday afternoons at 4:15 throughout the first semester. *One-half credit hour.* MR. MCNEARY, MR. CLOKE

Gc 6. ORIENTATION.—A general lecture course given Wednesday afternoons at 4:15 throughout the second semester, consisting of addresses by engineers and business and professional men for Technology freshmen. Open to the public. *One-half credit hour.* MR. MCNEARY, MR. CLOKE

MECHANICAL ENGINEERING

PROFESSORS SWEETSER AND WATSON; ASSISTANT PROFESSOR PRAGEMAN; MR. DAVEE; MR. PERKINS; MR. SPARROW; MR. LEKBERG

1. FOUNDRY AND FORGE WORK.—Foundry instruction is given in bench and floor molding, mixing of materials, core making, operation of cupolas, etc. Forge instruction is given in drawing, upsetting, forming, welding, and tool dressing. Shop work, *six hours a week. Two credit hours.* MR. DAVEE

2. PATTERN WORK.—Bench work and wood turning to familiarize the student with the tools used in modern woodworking practice, and to give him experience in working from dimensioned drawings. Pattern work, consisting of making complete patterns and core boxes from drawings. Shop work, *six hours a week. Two credit hours.* MR. DAVEE

7; 8. MACHINE WORK.—A small piece of machinery is manufactured which involves a study of the principles and operation of the various machine tools, at the same time including an insight into that phase of manufacturing which requires one part to fit another properly and the entire machine to be readily assembled. Shop work, *six hours a week. Two credit hours.* MR. PERKINS

9; 10. MACHINE WORK.—A shorter course than 7, 8. Shop work, *four hours a week. One and one-half credit hours.* MR. PERKINS

21. ELEMENTS OF MECHANICAL ENGINEERING.—A course designed to familiarize the student with the mechanical apparatus of manufacturing and power plants, and elementary mechanical engineering calculations. Classroom, *two hours a week. Two credit hours.* MR. LEKBERG

22. MATERIALS OF ENGINEERING.—Properties of the metals; production from ores; heat treatment; methods of testing. Classroom, *two hours a week. Two credit hours.* MR. LEKBERG

23. KINEMATICS.—A study of motion, velocity, and acceleration of machine parts, supplemented by drawings of cams, gear teeth, and graphical studies of kinematical problems. Classroom, *three hours a week;* drawing room, *three hours a week. Four credit hours.* MR. PRAGEMAN, MR. LEKBERG

24. MACHINE DESIGN.—A study of the design of machines; proportioning of parts for strength, rigidity, etc. Prerequisites, Course 23 and Mechanics 51. Classroom, *two hours a week.* Drawing room, *three hours a week. Three credit hours.* MR. PRAGEMAN, MR. LEKBERG

27. KINEMATICS.—A shorter course than 23, arranged for electrical engineers. Recitations, *three hours a week. Three credit hours.* MR. LEKBERG

33. HEAT ENGINEERING.—Laws of thermodynamics; laws of gases, saturated and superheated vapors; Carnot's, Rankine's, and actual steam engine cycles; use of steam tables; steam calorimetry; illustrative practical problems. Prerequisites, Mathematics 8 and Physics 1b, 2b, and 21 or 22. Recitation, *three hours a week. Three credit hours.* MR. WATSON

34. HEAT ENGINEERING.—Simple and compound steam engines, flow of steam, air compressors; flow of air; refrigeration. Prerequisite, Course 33. Recitation, *three hours a week. Three credit hours.* MR. WATSON

36. MECHANICAL LABORATORY.—Elementary experimental work such as calibration of instruments, use of steam and gas engine indicators, mechanical efficiency tests, etc. Laboratory, *three hours a week. One and one-half credit hours.* MR. SPARROW, MR. LEKBERG

37, 38. MECHANICAL LABORATORY.—Tests of materials, heating value of liquid and gaseous fuels, steam calorimetry, thermal efficiency, economy, and heat balance tests of steam engines, steam turbines, and gas engines. Prerequisite, Course 36. Laboratory, *three hours a week. One and one-half credit hours.* MR. WATSON, MR. SPARROW

39. MECHANICAL LABORATORY.—A course arranged for seniors in Civil Engineering. Testing of strength of materials; measurement of flow of water over weirs, through orifices and nozzles; calibration of venturi meters. Prerequisite, Civil Engineering 26 or 35. Laboratory, *three hours a week. One and one-half credit hours.* MR. SPARROW

40. MECHANICAL LABORATORY.—A course arranged for seniors in Chemical Engineering. Calibration of instruments; tests of engines; measurement of flow of water; tests of lubricants. Prerequisite, Course 43. Laboratory, *three hours a week. One and one-half credit hours.* MR. SPARROW

41. MECHANICAL LABORATORY.—A course arranged for seniors in Electrical Engineering. Calibration of instruments; testing strength of materials; testing of steam engines, gas engines, hydraulic testing. Prerequisite, Course 44. Laboratory, *three hours a week. One and one-half credit hours.* MR. SPARROW

43. HEAT ENGINEERING.—A short course for senior chemical engineers covering the laws of thermodynamics and their application to heat motors,

air compressors, refrigerating machinery, and power-plant equipment. Recitation, *three hours a week. Three credit hours.* MR. SPARROW

44. HEAT ENGINEERING.—A course similar to Course 33, given to electrical engineers. Prerequisites, Mathematics 8 and Physics 2. Recitation, *three hours a week. Three credit hours.* MR. SPARROW

45. HEAT ENGINEERING.—Simple and compound steam engines; steam turbines; gas engines; gas producers; fuels and combustion; steam and gas power-plant equipment and operation. For seniors in Electrical Engineering. Prerequisite, Course 44. Recitation, *three hours a week. Three credit hours.* MR. SPARROW

46. HEAT POWER.—Fuels and combustion, steam and gas power-plant equipment; arrangement, operation, and efficiencies of various types of apparatus. Prerequisite, Course 33. *Three hours a week. Three credit hours.* MR. WATSON, MR. SPARROW

50. THESIS.—The results of some original investigation or design presented in proper form. The subject should be selected early in the fall semester of the senior year. See regulations regarding degrees. *Three credit hours.* MR. SWEETSER and STAFF

71; 72. MECHANICAL LABORATORY.—Tests of condensers, boilers, air compressors, pumps, fans, hydraulic testing. Prerequisite, Course 38. Laboratory, *three hours a week. One and one-half credit hours.* MR. WATSON, MR. SPARROW

78. HYDRAULIC LABORATORY.—A course arranged for students taking Hydraulic Option in Civil Engineering. Testing of impulse and reaction water wheels, flow measurement and friction in pipes and channels, etc. Prerequisite, Course 39. Laboratory, *three hours a week. One and one-half credit hours.* MR. SPARROW

81. HEAT ENGINEERING.—A continuation of Courses 33 and 34, dealing with steam turbines; considerations affecting the design and efficiency of operation of the various types. Recitation, *two hours a week;* drawing room, *three hours a week. Three credit hours.* MR. SWEETSER, MR. WATSON

83. INDUSTRIAL MANAGEMENT.—Lectures and recitations on the various types of organization for industrial enterprises and systems of management. It deals with types of ownership, control, selection of plant site, and the elements of machine production, time and motion study, wage systems, and selection of personnel. Prerequisites, Course 24 and Economics 2b. Course 87 accompanying. Classroom, *two hours a week. Two credit hours.*

86. POWER PLANTS.—Design, costs, operating expenses, and economics of steam and gas power plants. Prerequisite, Course 81. Classroom, *three hours a week. Three credit hours.* MR. SWEETSER

87. Machine Design.—A continuation of Course 24, including the execution of the design of some typical machines. Prerequisites, Course 23 and 24. Drawing room, *six hours a week. Two credit hours.*

Mr. Prageman, Mr. Lekberg

88. Dynamics of Machines.—A study of the forces due to reciprocating and rotating masses with special application to balancing high-speed machinery, designing governors and flywheels. Prerequisites, Courses 23, 24 and 87. Recitation, *two hours a week. Two credit hours.*

Mr. Prageman

90. Heating and Ventilation.—Heat resistance of building materials, calculation of heat losses through various types of walls, windows, etc., heating systems, ventilating systems, humidification. Prerequisite, Course 34. Recitation, *three hours a week. Three credit hours.*

Mr. Watson, Mr. Prageman

93. Gas Engines.—Types, operation, fuels and combustion, carburetion, ignition, valves, cooling, governing, determination of cylinder sizes for given fuel and horsepower. Prerequisites, Courses 24 and 33. Classroom, *three hours a week. Three credit hours.* Mr. Sweetser

94. Hydraulic Machinery.—Hydraulic turbines; water wheels, various features of hydraulic power plant development. Prerequisites, Mechanics 52, Civil Engineering 26 or 35, and Mechanical Engineering 23. Recitation, *three hours a week. Three credit hours.* Mr. Prageman

98. Factory Organization and Management.—Lectures and assigned reading bearing upon various types of organization for industrial enterprises; planning and equipping of factory plants; systems of managements. Recitation, *two hours a week. Two credit hours.* Mr. Prageman

101. 102. Metallography.—Polishing, etching, and a microscopic study of the crystalline structure of metals. A study of the effect of heat treatment on the crystalline structure and physical properties of steel. Classroom, *one hour a week;* laboratory, *four hours a week. Three credit hours.*

Mr. Sweetser

103. 104. Advanced Fluid Flow.—A more theoretical study of flow of gases, vapors, and fluids than in undergraduate courses. Application to fans, blowers, compressors, steam turbines, refrigeration machinery, pumps, piping, and lubrication problems. Laws of similitude, effects of viscosity, applications of dimensional analysis. Classroom, *three hours a week. Three credit hours.* Mr. Sweetser, Mr. Watson

Inspection Trip.—A visiting trip of one week's duration to various manufacturing and power plants. This trip is open only to seniors who are

eligible for graduation. A complete schedule of the trip is prearranged and a member of the Department staff is in charge of the party.

MECHANICS

PROFESSOR WESTON

51; 52. MECHANICS.—The fundamental principles of statics, kinematics, and kinetics, with applications to practical problems; exercises in finding center of gravity and moment of inertia; the study of stresses and strains in bodies subject to tension, compression, and shearing; the common theory of beams, including shearing force, bending moment, and elastic curves; torsional stresses and theories of stress in long columns. Recitation, *five hours a week. Five credit hours.*

53; 54. MECHANICS.—The fundamental principles of statics, kinematics, and kinetics, with applications to practical problems; the study of simple stresses and strains with such applications as the time permits. Recitation, *three hours a week. Three credit hours.*

101. 102. ADVANCED MECHANICS.—General principles of kinematics, statics, and kinetics; the mathematical theory of elasticity; the theory of the potential function with applications to problems in gravitation, hydro-mechanics, etc. Recitation, *two hours a week. Two credit hours.*

General Courses

Not sponsored by a single College or School.

TUTORIAL HONORS

The purpose of the Tutorial Honors course is to afford the superior student an opportunity to pursue, under exceptionally favorable conditions, some subject which is deemed important in the equipment of the symmetrically educated person, but for which he has not yet found a place in his course of study. It is not intended to provide instruction in a student's major subject, but to enable him to gratify his intellectual curiosity in some new field. As a rule, only juniors or seniors who have attained the standard of the Dean's List may be admitted, although inclusion in that list is not strictly prerequisite, nor will it serve automatically to admit the student to the course. The course is designed solely for the benefit of the student of ability, ideas, and self-reliance who can profit by the free manner of tutorial instruction and close contact with an adviser specially qualified to direct his study. (For students in the College of Arts and Sciences this course has a wider scope. See Honors Courses.)

Gc 49. 50. Tutorial Honors.—The work is conducted by personal conferences and directed reading. The tutor is selected with the approval of the Committee on Tutorial Courses. *Two credit hours.*

MILITARY SCIENCE AND TACTICS

Lieutenant Colonel Alcott; Lieutenant Colonel Haw; Major Henkle; Major Cooper; Captain Loupret; Sergeant Harabosky; Sergeant Rinkaus; Sergeant Roy

Military instruction is required by law. The department is in charge of an officer of the regular army, detailed by the President of the United States, as Professor of Military Science and Tactics. The course maintained is that of an Infantry and of a Coast Artillery Unit of the Reserve Officers' Training Corps the purpose of which is to train officers for infantry and coast artillery.

The students are organized into infantry companies and coast artillery batteries, including a band. The whole is organized into a battalion officered by cadets selected for character, soldierly bearing, and military efficiency. Instruction is carried on under rules and regulations prescribed by the Secretary of Wa in accordance with law.

Uniforms (except shoes and leather waist belts), arms, and equipment of the latest model of the U. S. Army are furnished by the Government.

Each student is required to have a pair of regulation shoes and, to insure uniformity, as well as reduce the cost to the minimum, he is required to secure these from the University. They are issued with the uniform, become the student's property, and the cost is deducted from his military deposit. These shoes are purchased directly from the manufacturers and are charged to the student at cost.

The uniform prescribed is as follows:

For cadet commissioned officers, the olive-drab service uniform prescribed for officers of the U. S. Army, except that "R.O.T.C." insignia are used; for other than commissioned officers, the olive-drab service uniform prescribed for the R.O.T.C. Basic Course.

Cadets are required to wear the uniform when on military duty.

In the following schedule of courses, numbers 1 to 4 inclusive, are required of all physically fit male freshmen and sophomores except students in the Two-Year Course in Agriculture. Course 5, 6 is elective for juniors and Course 7, 8 is elective for seniors. The required courses cover two years' instruction as laid down in War Department regulations. The elective courses also cover two years *and once entered upon* become a prerequisite for graduation. Having completed Courses 1 to 4, inclusive, students electing to continue their military training, who comply with the requirements of law and regulations, are entitled to money commutation of subsistence at a rate fixed by the Secretary of War.

Three per cent of the total number of students who on March 1 of each year are enrolled in the second year of the Advanced Course (Mt 7, 8), may be designated by the institution as honor graduates. The term "honor graduate" is understood to apply to a graduate whose attainments in scholarship have been so marked as to receive the approbation of the head of the University, and whose proficiency in military training and intelligent attention to duty have won the commendation of the professor of military science and tactics.

The general object of the courses of instruction of the Reserve Officers' Training Corps is to qualify students for positions of leadership in time of a national emergency and to better qualify them for their duties in civil life.

Basic Course, Infantry

Freshman Year, Course 1, 2. *Three hours a week, one and one-half credit hours a semester*

First Semester—National Defense Act and mission of R.O.T.C.; obligations of citizenship; military history and policy; military discipline, courtesy and customs of service; military sanitation and first aid; military organization (General); organization of infantry; leadership, including close and extended order drills, ceremonies, practice of fundamentals of leadership.

Second Semester—Map reading; the rifle and rifle marksmanship; leadership, covering same subjects as in first semester.

Sophomore Year, Course 3, 4. *Three hours a week, two credit hours a semester*

First Semester—Automatic rifle; musketry; characteristics of infantry weapons and those of the supporting arms; leadership (review and continuation of first year's training, stressing fundamentals of leadership).

Second Semester—Scouting and patrolling; combat principles of squad and section in attack defense and security; leadership (continuation of first semester's work).

Advanced Course, Infantry

Junior Year, Course 5, 6. *Five hours a week, two credit hours a semester in the College of Agriculture, one and one-half credit hours a semester in the College of Arts and Sciences*

First Semester—Aerial photograph reading; machine guns; howitzer company weapons; pistol; administration; leadership (principles of and instructional methods in, with a thorough theoretical and practical review of basic training on this subject with a view to qualifying advanced students as instructors of basic students in close and extended order drill and ceremonies); care and operation of motor vehicles.

Second Semester—Review of rifle marksmanship; combat training (estimate of situation and combat orders; marches, security, development for combat, offensive and defensive combat, organization of the ground); combat principles of the rifle platoon, machine gun platoon and howitzer company squad; field fortifications; leadership (continuation of first semester's work); defense against chemical warfare.

Senior Year, Course 7, 8. *Five hours a week, two credit hours a semester*

First Semester—Military history and policy; military law I; military law II; leadership (principles of and instructional methods in, being a review of first year advanced training from the point of view of the leader and instructor); review of offensive and defensive combat, organization of the ground, combat orders, solutions of problems; combat principles of the rifle company, machine gun company and howitzer company platoon in attack, defense, and security.

Second Semester—Combat principles (continuation of first semester); property, emergency procurement and funds; regulations of officers' reserve corps; leadership (continuation of work of first semester); tanks and mechanization; antiaircraft defense; antitank defense; infantry signal communications; combat intelligence.

Basic Course, Coast Artillery

Freshman Year, Course 1, 2. *Three hours a week, one and one-half credit hours a semester*

First Semester—National Defense Act and R.O.T.C.; military obligations of citizenship; military history and policy; military discipline, courtesies, and customs of the Service; military sanitation and first aid; organization of the Army; organization of the Coast Artillery Corps; Coast Artillery ammunition; rifle marksmanship; leadership, theory of close order drill to include the platoon; the practice of close-order drill to include the company and ceremonies.

Second Semester—Coast Artillery weapons and materials; seacoast artillery gun drill; map reading; leadership (continuation of the theory and practice of close order drill to include the company and ceremonies).

Sophomore Year, Course 3, 4. *Three hours a week, two credit hours a semester*

First Semester—Characteristics of naval targets; fire control and position finding for seacoast artillery; drill of seacoast artillery range sections; rigging; operation and maintenance of Coast Artillery motor transportation; leadership (review and continuation of first year's training, adding thereto training in the fundamentals of leadership).

Second Semester—Basic gunnery fire control and position finding for anti-aircraft artillery; drill of anti-aircraft artillery gun section and range section; anti-aircraft artillery weapons and material; leadership (review and continuation of first-semester work in leadership).

Advanced Course, Coast Artillery

Junior Year, Course 5, 6. *Five hours a week, two credit hours a semester*

First Semester—Aerial photographic reading; administration; defense against chemical warfare; orientation; signal communications for Coast Artillery; fire control and position finding for seacoast artillery; applied gunnery for seacoast artillery; leadership (review of basic training, primarily from the point of veiw of an instructor and leader).

Second Semester—Basic and applied gunnery, fire control and position finding for anti-aircraft artillery; rifle and pistol marksmanship; leadership (continuation of work of first semester in this subject).

Senior Year, Course 7, 8. *Five hours a week, two credit hours a semester*

First Semester—Property, emergency procurement and funds; military law; military history and policy; mechanization; orientation; field fortifications for seacoast artillery; leadership (to qualify students as instructors and platoon and battery commanders).

Second Semester—Combat orders and solution of problems (Coast Artillery); technique and elementary tactics for seacoast and for anti-aircraft artillery; Officers Reserve Corps; leadership (continuation of work of first semester in this subject).

Band

Course 11, 12. *Three hours a week, one credit hour a semester*

The band consists of two classes of students: (1) those who register for band and receive one hour of academic credit; (2) those who do not register but who usually play with the band on public appearances, at military ceremonies, and on trips of the band as an undergraduate organization. Students who are registered for Band are required to practice two hours per week. For the equivalent of the third hour, they are required to attend such parades, ceremonies, and functions as designated by the Military Department and as requested by the Athletic Association.

Professor Sprague, Captain Loupret

PHYSICAL EDUCATION AND ATHLETICS

Men's Division

PROFESSORS WALLACE, CURTIS, BRICE, AND JENKINS; MR. KENYON; MR. WOODBURY

Athletics for men are under the supervision of the Athletic Board, composed of members of the faculty, alumni, trustees, and students. The management of athletics is in the hands of a faculty manager, who carries out the policies of the Athletic Board.

The schedules of all sports are arranged with the interest of both the University and the individual members of teams in mind. Letters and numerals are awarded by the Athletic Board to those men who earn them in competition in various sports. Admission to all home athletic contests is included in the blanket tax which is paid by each student at the time of registration.

Student managers are appointed in each sport and their work is carried on under the direction of the Faculty Manager. They are awarded a letter in their sport at the satisfactory completion of their duties.

Teams are maintained in varsity, junior varsity, and freshman football, varsity and freshman cross country, varsity relay, varsity and freshman indoor and outdoor track, varsity and freshman baseball, varsity winter sports, varsity and freshman tennis, varsity and freshman basketball, and golf.

The organization of the Physical Education Department has been planned to give the student such experience and instruction as will enable him to establish habits of recreation which will serve to promote healthful physical activity while in college and in his life after graduation. Especial emphasis will be placed upon out-of-door recreational exercises during the fall and spring, while the gymnasium will be used to its full extent during the winter months.

The Intramural Athletic Association is a part of the Physical Education Department, and was organized for the purpose of fostering athletics for men who are not participating in varsity sports at the time and for all others at any time.

Competition is carried on by twenty-three teams in eleven different sports and it is hoped that it will be possible to increase this number in the near future.

It is the plan of the Department to furnish opportunity for everyone to participate in his favorite physical education activity.

1, 2. PHYSICAL EDUCATION.—Required of all freshmen. Outdoor supervised mass games; competitive athletics including football, boxing,

wrestling, fencing, corrective exercises, elementary apparatus work, intramural sports, and indoor games. *Two hours a week, no credit.*

3, 4. PHYSICAL EDUCATION.—Required of all sophomores. Outdoor mass games and athletics including football, tag football, tennis, volley ball, playground ball, speedball, and winter sports. Indoor games include basketball, wrestling, boxing, fencing; corrective work and apparatus work will also be taught in the gymnasium. Credit is given for participation in intramural sports. *Two hours a week, no credit.*

Teachers' Course in Physical Education for Men

The following courses are for students who wish to teach physical education and who have completed Courses 1, 2 and 3, 4. The complete program is classed as a minor subject.

5. PHYSICAL EDUCATION.—The technique of teaching gymnastics. An outline of General Physical Education taking up specifically the meaning and results to be expected in modern physical education, first aid and massage, and the principles of training athletes and caring for athletic injuries. Practice teaching of games and mass athletics, supplemented by outside reading on physical education and hygiene. Methods of teaching football and basketball. *Five hours a week, two credit hours.*

6. PHYSICAL EDUCATION.—The study of games and play activities covering plays and games from a physical education standpoint. Apparatus work, formal and school-room gymnastics, methods of promoting grammar and high-school programs in physical education and health. Methods of teaching track and baseball. *Five hours a week, two credit hours.*

7. PHYSICAL EDUCATION.—Health problems of school and community with emphasis on rural schools. A continuation of the technique of teaching mass games, corrective work, formal and informal gymnastics. Training and conditioning of athletes. Practice teaching. Methods of teaching football and basketball. *Five hours a week, two credit hours.*

8. PHYSICAL EDUCATION.—The administration of Physical Education programs in elementary and secondary schools. Graded apparatus work, training of leaders, corrective work individually and in classes. Practice teaching. Methods of teaching track and baseball. *Five hours a week, two credit hours.*

Women's Division

Associate Professor Lengyel; Assistant Professor Rogers;
Miss Cassidy

It is the purpose of this department to develop good physical condition among college women by providing opportunity for the formation of wholesome habits and for relaxation and recreation.

A medical examination by the University physician and a physical examination by the Director of Physical Education are given each entering student during the first week of school, and thereafter as often as seems advisable. These are intended: to assist in the placement of the student with reference to her college program in the light of her physical ability and limitations; to inform the student as to her exact physical condition, so that she can intelligently conduct her mental and physical activity; and to discover as soon as possible any organic and physical defects in order to hasten their treatment.

Instructors in all activities are placing particular emphasis on two important aspects: the physical needs of the individual and the fun of the game. To stimulate a wholesome competitive interest on the part of the student, the Maine Athletic Association Women's Branch conducts a series of interclass activities in hockey, basketball, archery, tennis, and other sports.

Regulation gymnasium uniforms, described elsewhere in the catalog, are required for this work.

1, 2. Elementary Physical Education.—Required of all freshmen. Consists of postural and development gymnastics and physical efficiency tests of endurance, strength, and agility. Hockey, tennis, basketball, baseball, archery, and track may be substituted for this in season. *Two hours a week, no credit.*

1a, 2a. Modern Dance, Elementary.—May be substituted for Course 1, 2. Elements of the modern dance as introduced by Mary Wigman and Martha Graham. Appreciation of the dance is taught. Emphasis is placed upon mood, body control, and the development of imaginative powers. *Two hours a week, no credit.*

3, 4. Advanced Physical Education.—Required of all sophomores. A continuation of Course 1, 2, with advanced gymnastics and apparatus work, and more difficult physical efficiency tests. The sports listed above may be substituted for this in season, for the purpose of developing greater skill and accuracy, as well as providing recreation. *Two hours a week, no credit.*

3a, 4a. Modern Dance, Advanced.—Continuation of Course 1a, 2a with more advanced technique and dance form. May be substituted for Course 3, 4. *Two hours a week, no credit.*

5, 6. Tap Dancing.—Can be taken for Physical Education credit for one year only, either freshman or sophomore year.

Individual Gymnastics—Required of all freshmen and sophomores referred to the Department by the medical examiner or by their family physician for special work. Prescribed exercises for body building, posture, foot work, etc. Students who are required to take this work substitute it for Courses 1, 2 and 3, 4. *Two hours a week, no credit.*

21. Hygiene.—A one-semester course, required of all freshman girls in the College of Arts and Sciences. It is designed to give a mature and scientific understanding of the principles of health and to create an interest in their application to one's self, and one's social relationships. Classroom, *two hours a week. Two credit hours.*

Members of the Departmental Staff and Others

Teachers' Certificate Courses in Physical Education for Women

The following courses are for students who wish to minor in Physical Education and thus obtain a Secondary State Teachers' Certificate from the State Department of Education.

Prerequisites: Physical Education 1, 2, 3, 4 without credit; General Zoology, *four credit hours;* Elementary Physiology and Hygiene, *two credit hours;* Human Physiology, *four credit hours.*

7. The Principles of Physical Education and Hygiene.—An introductory course in the interpretation and objectives of physical education. Open to juniors who are preparing to teach. *Three hours a week and field work, two credit hours.*

8. Physical Examination and Measurements.—This course covers the purposes, management, and technique of physical examination and first aid with the exception of the determination of organic capacity for activities. Open to juniors who have fulfilled the requirements of Zoology 1, 5, 12. *Three hours a week and field work, two credit hours.*

9. Methods for Teaching Physical Education.—This course deals with the methods of teaching physical education activities through the grades and high school. It also gives opportunity for practice teaching. Open to seniors who have passed Courses 7 and 8. *Three hours a week and field work two credit hours.*

12. First Aid.—Given biennially in the spring semester. This course includes the fundamentals prescribed by the American Red Cross in their First Aid Outline. Upon its completion the American Red Cross First Aid Certificate will be awarded. *Two credit hours.*

14. Girls' Basketball and High-School Athletics.—It takes up girls' athletics from the standpoint of girls' need of physical education. Specializes in athletics. Instruction in organized team games such as basketball, hockey, tennis, archery; recreational activities such as volley ball, badminton, deck tennis. Plan and diagram of plays, skeleton practice system and methods of training. *Three hours a week and field work, two credit hours.*

16. Teaching of Recreational Activities.—This course includes the study of the need, nature, and function of recreational programs and the conducting of festivals and pageants. Special consideration is given to the contribution of physical education to community recreation in the phases needed by social workers, 4-H Club leaders, directors, and teachers of physical education in organizing and administering recreational programs. Given bi-annually in the spring semester. *Three credit hours.*

It is recommended that students enrolling in the above courses should have at least six hours of each of the following departments: Education, Psychology, Sociology, and Public Speaking.

Graduate Study

FACULTY OF GRADUATE STUDY

ROY MERLE PETERSON, Ph.D., *Acting Dean of Graduate Study and Professor of Romance Languages*
LAMERT SEYMOUR CORBETT, M.S., *Professor of Animal Industry*
WILLIAM JORDAN SWEETSER, S.B., *Professor of Mechanical Engineering*
ROBERT RUTHERFORD DRUMMOND, Ph.D., *Professor of German*
HARLEY RICHARD WILLARD, Ph.D., *Professor of Mathematics*
JOHN H ASHWORTH, Ph.D., *Professor of Economics and Sociology*
CHARLES ANDREW BRAUTLECHT, Ph.D., *Professor of Chemistry and Chemic Engineering*
MILTON ELLIS, Ph.D., *Professor of English*
EMBERT HIRAM SPRAGUE, B.S., *Professor of Sanitary Engineering*
*ALBERT LEWIS FITCH, Ph.D., *Professor of Physics*
DONALD FOLSOM, Ph.D., *Plant Pathologist, Experiment Station*
CHARLES HENRY MERCHANT, Ph.D., *Professor of Agricultural Economics and Farm Management*
JAMES HOWARD WARING, Ph.D., *Professor of Horticulture*
PAUL CLOKE, E.E., Eng.D., *Dean of the College of Technology and Professor of Electrical Engineering*
OLIN SILAS LUTES, Ph.D., *Dean of the School of Education and Professor of Education*
CHARLES ALEXIUS DICKINSON, Ph.D., *Professor of Psychology*
PEARL STUART GREENE, A.M., *Professor of Home Economics*
FERDINAND HENRY STEINMETZ, Ph.D., *Professor of Botany and Entomology*
WILLIAM EDWARD BARROWS, E.E., *Professor of Electrical Engineering*
ARTHUR ST. JOHN HILL, E.E., M.S.E., *Professor of Electrical Engineering*
FRED GRIFFEE, Ph.D., *Biologist and Director of the Experiment Station*
RONALD BARTLETT LEVINSON, Ph.D., *Professor of Philosophy*
ELMER REEVE HITCHNER, Ph.D., *Professor of Bacteriology*
MARION DEYOE SWEETMAN, Ph.D., *Professor of Home Economics*
MAURICE DANIEL JONES, M.S., *Professor of Agricultural Economics and Farm Management*
PAUL DECOSTA BRAY, Ch.E., *Professor of Pulp and Paper Technology*

*On leave of absence, 1938-39.

ARTHUR LOWELL DEERING, B.S., Sc.D., *Dean of the College of Agriculture*
WESTON SUMNER EVANS, M.S., *Professor of Civil Engineering*
JOSEPH MAGEE MURRAY, Ph.D., *Professor of Zoology*
JOHN ANTHONY CHUCKA, Ph.D., *Professor of Agronomy and Agricultural Engineering*
DWIGHT BURGESS DEMERITT, M.F., *Professor of Forestry*
LLEWELLYN MORSE DORSEY, M.S., *Professor of Dairy Husbandry*
HARRY WOODBURY SMITH, Ph.D., *Professor of Biological and Agricultural Chemistry*
AVA HARRIET CHADBOURNE, Ph.D., *Professor of Education*
GEORGE WILLIAM SMALL, Ph.D., *Professor of English*
ALBERT MORTON TURNER, Ph.D., *Professor of English and Comparative Literature*
EDWARD JONES ALLEN, Ph.D., *Dean of the College of Arts and Sciences and Professor of Economics*
WILBER ELMORE BRADT, Ph.D., *Professor of Chemistry*
WILLIAM FRANKLIN DOVE, Ph.D., *Biologist, Experiment Station*
EDWARD FRENCH DOW, Ph.D., *Professor of History and Government*
WALTER JOSEPH CREAMER, E.E., *Professor of Communication Engineering*
CHARLES BURTON CROFUTT, Ph.D., *Associate Professor of Physics*
EVELYN FAYE WILSON, Ph.D., *Associate Professor of History and Government*
EDWARD NEWCOMB BRUSH, Ph.D., *Associate Professor of Psychology*
CLARENCE EDWIN BENNETT, Ph.D., *Associate Professor of Physics*
NOAH ROSENBERGER BRYAN, Ph.D., *Associate Professor of Mathematics*
HIMY BENJAMIN KIRSHEN, Ph.D., *Associate Professor of Economics and Sociology*
ERNEST DELMORE JACKMAN, A.M., *Associate Professor of Education*
CHARLES ORVILLE DIRKS, Ph.D., *Associate Professor of Entomology*
JOHN RAYMOND CRAWFORD, Ph.D., *Acting Secretary of the Faculty and Assistant Professor of Education*
RISING LAKE MORROW, Ph.D., *Assistant Professor of History and Government*
LESLIE FRANCES SMITH, A.M., *Assistant Professor of Classics*
BEATRICE CONEY, M.S., *Assistant Professor of Home Economics*

ADMINISTRATION

Graduate work is administered by the Faculty and Dean of Graduate Study. The details of administration are in the hands of an executive committee consisting of the Dean, two members from the Agricultural Experi-

ment Station, two from each of the three colleges—Agriculture, Arts and Sciences, and Technology—and two from the School of Education.

ADMISSION

Students who hold a bachelor's degree from the University of Maine, or from an institution granting a fully equivalent degree, and who desire to pursue advanced studies, are admitted as graduate students and are under the direction of the Faculty of Graduate Study, whether they are candidates for a degree or not.

REGISTRATION

At the beginning of each semester all graduate students, whether candidates for a degree or not, are required to register with the head of the department in which they propose to do their major work, obtain the approval of the Dean, and complete their registration by filing their program of study at the Registrar's office. A fee of two dollars is charged for registration after two weeks have elapsed.

TUITION AND FEES

The tuition charges for graduate students are the same as for undergraduates.

Candidates for professional degrees are required to pay a fee of $5.00 at the time of registration, and a fee of $10.00 upon the presentation of the thesis.

FELLOWSHIPS AND SCHOLARSHIPS

Applications for graduate fellowships and scholarships should be made to the Dean of Graduate Study by April 1.

Trustee Fellowships.—The Trustees of the University established in 1931 three graduate fellowships of the value of $500.00 each, to be assigned annually on a competitive basis by a committee of the Faculty of Graduate Study.

Trustee Graduate Scholarships.—Eight scholarships, of the value of a year's tuition, have been established by the Board of Trustees, two each

for graduates of the three colleges in the University and the School of Education. Holders of these scholarships may be called upon to render a reasonable amount of assistance in their major department.

MARITIME PROVINCES GRADUATE SCHOLARSHIPS.—By action of the Trustees of the University, a graduate scholarship is available annually in each of the four academic divisions of the University, on a competitive basis, for graduates of the colleges and universities in the Provinces of New Brunswick, Nova Scotia, and Prince Edward's Island. These scholarships have a value of $250.00, equivalent to a full year's tuition for a student residing without the State.

THE COE RESEARCH FUND

The Trustees of the University have set aside the sum of $100,000 to form a permanent fund, the proceeds of which are to be used for carrying on various kinds of research work within the University. Applications for grants from this fund should be addressed to Professor E. R. Hitchner, Secretary. It is hoped that this fund may later be increased by grants from other sources.

DEGREES

The degrees of Master of Arts, Master of Science, Master of Arts in Education, and Master of Science in Education are granted to candidates who hold corresponding bachelor's degrees and fulfill the requirements of residence and scholarship.

A candidate for an advanced degree must give evidence by his previous record that he is qualified to do graduate work of a satisfactory grade. If he is a graduate of another institution he is required to submit, with his plan of study, credentials covering the courses pursued and the standing attained. If he is a graduate of the University of Maine he must present his record from the Registrar's office.

REQUIREMENTS FOR THE MASTER'S DEGREE

General Requirements

A candidate for the master's degree is required to devote at least one year to resident graduate study and to complete work amounting to fifteen

hours per week throughout the college year (thirty semester hours). In the case of summer session students, four sessions, or the equivalent, are normally accepted as fulfilling residence requirements.

At least one year must elapse between the conferring of the bachelor's and the master's degree. No work done before the recommending for the bachelor's degree shall be counted toward the master's degree. All requirements for the degree must be completed within an eight-year period.

Program of Studies

As soon after registration as practicable, the student, in conference with his major instructor, will plan his entire course of study for the master's degree. The major instructor will present the proposed curriculum for approval to a committee, which consists of the Dean of Graduate Study and the representatives of the candidate's college on the Executive Committee of the faculty. The student is formally admitted as a candidate for the master's degree only when his thesis subject has been submitted and approved.

The curriculum shall include work in a major department or subject in which the candidate has already completed the equivalent of at least two years of undergraduate study. The work may all be done in one department, or it may include not more than two minor subjects which bear a distinct relation to the general plan or purpose of the major subject. All of the work must be of advanced character and must be tested by examinations which the candidate shall pass with distinction.

Courses of study intended primarily for graduate work are numbered above 100 in the catalog, but courses numbered 51 to 100 inclusive may be counted upon approval. Courses numbered 50 or under may not be accepted for graduate credit.

Each candidate for a degree is furnished with a registration book containing the names and numbers of the courses which have been approved for his degree.

Foreign Language Requirement

Certain departments have a foreign-language requirement as stated below:

Bacteriology and Biochemistry: a reading knowledge of German. In addition, a reading knowledge of French is recommended.

Botany and Entomology: a reading knowledge of German or French.

Chemistry: an ability to read chemical literature in German.

Plant Pathology: an ability to read the literature of this field in German.

A reading knowledge of French for literature in this subject is also recommended.

Zoology: a reading knowledge of French or German. An acquaintance with both languages is desirable.

For English majors at least an elementary knowledge of Latin, French, and German is recommended.

Theses

The candidate shall prepare, as a part of his curriculum, a satisfactory thesis on some topic connected with his major subject. It is ordinarily expected that the thesis shall be a limited piece of original research, with the design of making a minor contribution to scholarship in the student's particular field. A student of proved maturity, intelligence, accuracy, and industry, however, whose objectives and interests are not best furthered by this type of research, may be authorized to submit a thesis of different type. This may consist of a digest and analysis of the literature on a topic or problem of major importance in the student's field; the analysis of a set of accepted statistics in that field; a comprehensive outline and critique of current practices; or a report of a project undertaken and carried on under competent direction.

For students carrying a full registration during the regular sessions, the subject shall be submitted and approved by the end of the first semester, while for students enrolled in summer sessions the time shall be by the end of the second summer session in attendance. Beginning with the third summer session, evidence of satisfactory progress on the thesis is required of all students who are candidates for a degree.

The thesis must be deposited in completed form with the Dean of Graduate Study before the final examination. It must have been previously approved by a committee composed of his major instructor, the head of the major department, and the members of the Executive Committee from the candidate's college, or by a committee which shall be appointed by the Dean of Graduate Study for that purpose. The thesis shall be read and approved by no fewer than three persons.

Examinations and Awarding of Degrees

Near the end of the course of study for the master's degree, after his thesis has been approved, the candidate will be required to pass an oral examination covering his work, including the thesis. On request of the major instructor, the time for such examination will be arranged by the Dean of

Graduate Study to accord so far as possible with the convenience of all concerned. Oral examinations will ordinarily be held in the months of May and August, but at the discretion of the Executive Committee they may be held at other times. Oral examinations are conducted by a committee composed of those instructors from whom courses have been taken, and are open to all voting members of the University faculty. Any member of the faculty at the examination has the privilege of questioning the candidate.

Graduates are required to receive their degree in person at Commencement unless espcially excused by the President. Students completing their requirements in the summer, however, may have their degrees awarded in the early fall.

Additional Information

Further information about the administration of graduate work and detailed requirements for the form and arrangement of theses may be found in a pamphlet entitled "Degrees and Theses."

PROFESSIONAL DEGREES

The professional degrees of Chemical Engineer (Ch.E.), Civil Engineer (C.E.), Electrical Engineer (E.E.), and Mechanical Engineer (M.E.) may be conferred upon graduates in the curricula of Chemistry, Chemical Engineering, or Pulp and Paper Technology, Civil Engineering, Electrical Engineering, and Mechanical Engineering, respectively, upon the completion of the requirements stated below. Graduates receiving the degree of Bachelor of Science in General Engineering are eligible to receive, upon the completion of the requirements listed below, the professional degree of Chemical Engineer, Civil Engineer, Electrical Engineer, or Mechanical Engineer, depending upon the field of work of the candidate and the judgment of the dean and the heads of departments in the College of Technology.

The presentation of a satisfactory thesis, which shall constitute an original contribution to the advance of engineering, is required of all candidates. The candidate must hold a position of responsibility and must have accomplished professional work of eminence for a period of at least five years subsequent to graduation. A full and complete statement covering the professional experience of the candidate must be presented at the time of registration. Candidates are expected to be present in person to receive their degrees.

UNIVERSITY OF MAINE STUDIES

The *University of Maine Studies,* Second Series, are issued under the direction of the Faculty of Graduate Study, for the purpose of publishing notable pieces of research work produced by graduate students and members of the faculty.

Copies of the *Studies* and lists of subjects may be obtained from the University Library.

Maine Agricultural Experiment Station

GOVERNMENT OF THE STATION

By authority of the Trustees the affairs of the Station are considered by the Station Council, composed of the President of the University, three members of the Board of Trustees, the Director of the Station, the heads and associates of the various departments of the Station, the Dean of the College of Agriculture, the Director of the Extension Service, the Commissioner of Agriculture, and one member each from the State Pomological Society, the State Grange, the State Dairymen's Association, the Maine Livestock Breeders' Association, and the Maine Poultry Improvement Association. The recommendations of the Council are referred to the Trustees for final action. The Director is the executive officer of the Station and the other members of the staff carry out the lines of research that naturally come under their departments.

OBJECT

The purpose of the agricultural experiment stations is defined in Acts of Congress establishing them and providing further funds for their support as follows:

"It shall be the object and duty of said experiment stations to conduct original researches or verify experiments—bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective States and Territories," and "including such scientific researches as have for their purpose the establishment and maintenance of a permanent and efficient agricultural industry, and such economic and sociological investigations as have for their purpose the development and improvement of the rural home and rural life."

INCOME

The income of the Station is derived from the following sources: Federal and State appropriations, payments for inspection analyses made for the

Commissioner of Agriculture, and from the sale of farm produce. Through appropriations to the University the State provides for the cost of printing Station publications.

EQUIPMENT

Most of the Station offices are in Holmes Hall, described in the section on University buildings. Agricultural Economics is located in Winslow Hall and Home Economics in Merrill Hall. The Station is equipped with laboratories and apparatus for the conduct of research in the following lines: animal breeding and nutrition, plant breeding and nutrition, chemistry related to agriculture, entomology, plant pathology, agricultural economics, and home economics. Equipment and facilities for dairy husbandry research are available at Highmoor Farm. The Station has extensive collections illustrating the botany and entomology of the State. It has a library of nearly 7,000 volumes comprising agricultural and biological journals and publications of the various experiment stations.

HIGHMOOR FARM

The State Legislature of 1909 purchased a farm upon which the Maine Agricultural Experiment Station "shall conduct scientific investigations in orcharding, corn, and other farm crops." The farm is situated in the counties of Kennebec and Androscoggin, largely in the town of Monmouth. It is on the Farmington branch of the Maine Central Railroad, two miles from Leeds Junction. A flag station, "Highmoor," is on the farm.

The original farm contains 225 acres, about 200 of which are in orchards, fields, and pastures. The Legislature in 1925 provided an appropriation for the purchase of 30 acres adjoining the farm for a demonstration orchard. There are in the neighborhood of 2500 apple trees upon the place. Fields that are not in orchards are well adapted to experiments with corn, potatoes, and similar farm crops. The house is well arranged for the station offices and for the home of the farm superintendent. The barns are large, affording storage for hay and grain. A cold storage plant has been provided for apples. The capacity of this plant is about 7500 boxes.

AROOSTOOK FARM

By action of the Legislatures of 1913 and 1915 a farm was purchased in Aroostook County for scientific investigations in agriculture to be under "the

general supervision, management, and control" of the Maine Agricultural Experiment Station. The farm is in the town of Presque Isle, about two miles south of the village, on one of the main roads to Houlton. The Bangor and Aroostook Railroad crosses the farm.

The farm contains about 275 acres, somewhat more than one-third of which is cleared. The eight-room house provides an office and a home for the farm superintendent. The large barn affords storage for hay and grain and has a potato storage house in the basement.

The U. S. Department of Agriculture, Bureau of Plant Industry, cooperates with the Station on some of the research. The Department has erected a small laboratory building, a potato storage house, and a greenhouse on the farm as aids in facilitating the research work.

INVESTIGATIONS

The Station continues to restrict its work to a few important lines, believing that it is better for the agriculture of the State to study thoroughly a few problems than to spread over the whole field of agricultural science. It has continued to improve its facilities and segregate its work in such a way as to make it an effective agency for research in agriculture. Prominent among the lines of investigation are studies upon the food of man and animals, the diseases of plants and animals, breeding of plants and animals, investigations in animal husbandry, orchard and field experiments, poultry investigations, entomological, agricultural, and home economics research.

INSPECTIONS

The Commissioner of Agriculture is the executive of the laws regulating the sale of agricultural seeds, commercial feeding stuffs, commercial fertilizers, dairy products, drugs, foods, fungicides and insecticides. The law requires the commissioner to collect samples and have them analyzed at the Station. The law also requires the Station to make the analyses and publish the results.

PUBLICATIONS

The Station issues three series of publications: Bulletins, Official Inspections, and Miscellaneous Publications.

The results of the work of investigation are published in part in scien-

tific journals at home and abroad, in U. S. Department of Agriculture publications, and in bulletins of the Station. All of the more important and immediately practical studies are published in the Station Bulletins. The Bulletins for a year together make up the Annual Report. Bulletins are sent to the press of the State, to exchanges, libraries, and scientific workers. Bulletins which contain matter of immediate value to practical agriculture are sent free to residents of Maine whose names are on the permanent mailing list.

The results of the work of inspection are printed in pamphlet form and are termed *Official Inspections*. Official Inspections are sent to dealers within the State; those that have to do with fertilizers, feeding stuffs, and seeds are sent to farmers; and those reporting foods and drugs are sent to a list of several thousand women within the State.

The Miscellaneous Publications consist of newspaper bulletins, circulars, and similar fleeting publications. These are sent to different addresses according to the nature of the subject matter.

On request, the name of any resident of Maine will be placed on the permanent mailing list to receive notices of the Bulletins and Official Inspections as they are published. Upon request, any of the Bulletins or Official Inspections will be mailed free of charge to residents of Maine.

Summer Session

The Summer Session begins the first week in July and continues for six weeks. The faculty is made up mainly of members of the University staff of professorial rank and visiting professors from other institutions. About 135 courses in nineteen departments are now offered. Instruction is given in most of the subjects taught in the College of Arts and Sciences as well as in Chemistry, Pulp and Paper Technology, Physical Education, Home Economics, and Nursing Education. A large amount of work is available in Education.

As an integral part of the University organization, the Summer Session insists upon similar standards of academic achievement. In general, the same requirements for admission and the same regulations apply as during the regular academic year.

The Session is primarily for the benefit of teachers and superintendents of Maine and other states who desire to take professional courses in the field of Education or to pursue other subjects which may be helpful to them in connection with their work. Hence special attention is given to teachers' courses in the various subjects offered. The Session also affords opportunities for students in the University of Maine or other similar institutions to secure credits toward a degree and complete their work in a shorter time than would otherwise be possible. Normal-school graduates who are admitted to advanced standing as candidates for a bachelor's degree in the School of Education may do a considerable part of their work in the Summer Session.

Properly qualified graduates of colleges or universities may enroll in most departments as candidates for a master's degree and complete their work by attendance at the Summer Session. The minimum residence requirement in such cases is four sessions.

Classes meet five times a week, Monday to Friday inclusive. Except in special cases the maximum registration is for three courses, the successful completion of which entitles the student to six semester hours of credit.

A registration fee of $10.00 is paid by all students. An additional fee is charged for tuition amounting to $5.00 for each semester hour of work. This means a total of $40.00 for a maximum program of six credits.

The opening and closing dates for 1939 are Wednesday, July 5, and Saturday, August 12. The Summer Session Bulletin, giving a list of the courses offered and detailed information, is published annually about March 15. For copies and other information address Dr. Roy M. Peterson, Director, Orono, Maine.

Extension Courses

The University offers a limited amount of work each year through extension courses given by various departments. These courses are handled by the office of the School of Education. Courses are offered by departments in all the colleges of the University according to the demand for such work. The list is revised and distributed in mimeographed form each year in September.

Two general types of courses are offered as follows: (1) Correspondence courses, which are handled entirely by mail on an individual basis; (2) extension classes, which may be organized in any community where sufficient demand exists, provided an instructor is available for the course desired.

College credit toward a degree may be earned by both types of extension courses, subject to the regulations of the department and college in which the student is registered, the approval of which should always be secured in advance if such credit is desired.

Alumni Associations

GENERAL ASSOCIATION

President, Fred D. Knight '09, 39 Boylston St., Boston, Mass.
Vice-president, George D. Bearce '11, Bucksport
Clerk, Maurice D. Jones '12, Orono
Treasurer, Paul D. Bray '14, Orono
Executive Secretary, Charles E. Crossland '17, Orono
Assistant Secretary, Philip J. Brockway '31, Orono

ALUMNI COUNCIL

Members at Large

	Term expires
Earle R. Gowell '30, Rockland	1939
Mrs. William F. Schoppe '08, R.F.D. #2A, Auburn	1939
Harry E. Sutton '09, P. O. Box 1100, Boston, Mass.	1939
F. Drummond Freese '15, 144 Broadway, Bangor	1939
Andrew J. Beck '13, Washburn	1939
Raymond H. Fogler '15, Montgomery Ward & Co., Chicago, Ill.	1940
Norman H. Mayo '09, 485 Plainfield St., Providence, R. I.	1940
George S. Williams '05, 9 Green Street, Augusta	1940
Mrs. Hamlyn N. Robbins '19, R.F.D. #1, Scarboro	1941
Mrs. Merrill Bowles '21, 176 Nowell Rd., Bangor	1941
Richard E. McKown '17, Bar Harbor	1941
Robert F. Thurrell '15, East Wolfeboro, N. H.	1941
Harold Cooper '15, 77 Davis Ave., Auburn	1941

College of Agriculture

Frank W. Hussey '25, Presque Isle	1941

College of Arts and Sciences

Hazen A. Ayer '24, 50 Congress Street, Boston	1939

College of Technology

Walter H. Burke '06, 2 Rector St., New York City..... 1941

College of Law

Robert W. DeWolfe '07, 102 Exchange St., Portland..... 1940

Alumni Representative on Board of Trustees

Harold M. Pierce '19, P.O. Box 58, Bangor..... 1940

LOCAL ASSOCIATION OFFICERS

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Androscoggin Alumnae—President, Mrs. William F. Schoppe '08, R.F.D. #2A, Auburn.

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Piscataquis County—President, Harland A. Ladd '25, Milo; Secretary, Mrs. Harland A. Ladd '25, Milo.

Portland Alumnae—President, Mrs. Olive C. O'Brien '20, 325 Spring St., Portland; Secretary, Miss Dorothy Frye '35, 76 Portland St., Portland.

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Somerset County—President, Gerald C. Marble '17, Dyer St., Skowhegan.

Southern Aroostook—President, Joseph Robinson '21, 5 Watson Ave., Houlton; Secretary, Mrs. Margaret Webber '31, 30 Highland Ave., Houlton.

Southern Kennebec—President, Williams B. Getchell, Jr., '27, 89 Stone St., Augusta; Secretary, Miss Dorothy E. Mossler '25, 2a Maple St., Augusta.

The Maine Club—President, Frank Linnell '29, 29 Winter St., Auburn; Secretary, John L. McCobb '25, 62 Winter St., Auburn.

Waldo County—President, Spurgeon K. Benjamin '35, 11 Grove St., Belfast; Secretary, Miss Barbara Higgins '30, Extension Service, Belfast.

Washington County—President, Charles W. Fenderson '14, 154 Main St., Calais; Secretary, Lincoln A. Sennett '25, Machias.

York County—President, Joseph E. Harvey '16, 113 Main St., Biddeford; Secretary, Raymond H. Lovejoy '18, Sanford.

CALIFORNIA

Southern California—President, George E. Springer '10, 1128 West 50th St., Los Angeles; Secretary, Ezekial L. Chase '26, 957 No. Ridgewood Place, Hollywood.

CONNECTICUT

Hartford—President, Richard G. Clark '27, 46 Lexington Rd., W. Hartford; Secretary, Donald Henderson '31, 25 Denison St., Hartford.

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District of Columbia—President, William H. Buck '15, 4909-1st St., N. W., Washington; Secretary, Miss Mildred H. Merrill '13, 1673 Columbia Rd., Washington.

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Chicago—President, Alvah R. Small '04, 207 E. Ohio St., Chicago; Secretary, Rollins A. Seabury '12, 1573 Thacker St., Des Plains.

MARYLAND

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MASSACHUSETTS

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Boston Alumni—President, Philip R. White '22, 37 Prescott St., Reading; Secretary, James E. Hardy '16, 74 Glendale St., Quincy.

Western Massachusetts—President, Walter O. Harvey '09, 55 Emery St., Springfield; Secretary, Paul Langlois '34, Sunrise Terrace, Agawam.

Worcester County—President, Frederick D. Gibbs '18, 122 Richmond Ave., Worcester; Secretary, Mrs. Frederick D. Gibbs '22, 122 Richmond Ave., Worcester.

MICHIGAN

Detroit—President, Frank E. Watts '01, 2516 LaSalle Gardens So., Detroit; Secretary, Ralph E. Thomas '23, 14030 Cloverlawn Ave., Detroit.

MINNESOTA

Northwestern—President, James H. Davidson '21, 1100 Builders Exchange, Minneapolis.

MISSOURI

St. Louis—President, Harold A. Richards '13, 4015 Euclid Ave., St. Louis; Secretary, Mrs. Harold A. Richards, 4015 Euclid Ave., St. Louis.

NEW HAMPSHIRE

Southern—President, Everett F. Libby '18, 207 Sagamore St., Manchester; Secretary, Eli A. Marcoux '21, 922 Elm St., Manchester; Alumnae Secretary, Miss Priscilla Noddin '32, Goffstown H. S., Goffstown.

White Mountain—President, Daniel W. MacLean '09, Senior High School, Berlin; Secretary, Robert Rich '18, 173 Main St., Berlin.

NEW YORK AND NEW JERSEY

Central New York—President, Joseph O. Whitcomb '00, 618 Ostrom Ave., Syracuse; Secretary, Mrs. Vernon Bryant '28, 274 Woodbine Ave., Syracuse.

New York Alumnae—President, Mrs. Evelyn Weaver '23, 88 De Peyster Ave., Tenafly, N. J.; Secretary, Mrs. Angela Wardle '23, 115 Sylvan Ave., Leonia, N. J.

New York Alumni—President, George L. Freeman '03, 335 Rich Ave., Mt. Vernon; Secretary, Clarence Bassett '29, 314 East 201 St., New York City.

Northeastern New York—President, Milton F. Kent '30, R.F.D. #2, Scotia; Secretary, Winslow L. Jones '30, 916 McClellan Ave., Schenectady.

Western New York—President, Russell M. Look '29, 145-69th St., Niagara Falls; Secretary, Abram J. Libby '29, 20 W. Girard Blvd., Kenmore.

OHIO

Cleveland—President, Allen M. Knowles '04, 3166 Washington Blvd., Cleveland Heights; Secretary, George E. Power '28, 9634 Silk St., Cleveland.

PENNSYLVANIA

Lehigh Valley—President, Harold T. Pierce '29, 1146 Turner St., Allentown; Secretary, Ernest B. Scott '26, 145 No. 9th St., Allentown.

Philadelphia—President, Norman C. Small '16, 216 Kensington Ave., Trenton, N. J.; Secretary, Arthur R. Chapman '21, 1034 Allengrove St., Philadelphia.

Pittsburgh—President, Dr. Kenneth Field '25, Carnegie Institute, Pittsburgh; Secretary, J. Donald Babb '26, 423 Olympia Rd., Mt. Washington, Pittsburgh.

RHODE ISLAND

Providence—President, Earle L. Ferren '20, 707 Turks Head Bldg., Providence; Secretary, Henry Turner '22, 10 Harlem St., Rumford.

VERMONT

Vermont—President, Harold L. Durgin '24, 72 Pine St., Rutland; Secretary, Mrs. Stanley B. Hyde '25, 48 Pleasant St., Ludlow.

SPECIAL ASSOCIATIONS

THE UNIVERSITY OF MAINE TEACHERS' ALUMNI ASSOCIATION—President, Leroy Huckins '22, Winthrop; Secretary, Charles E. Crossland '17, Orono; Treasurer, K. Jean Keirstead '31, 20 Oak St., Old Town.

PULP AND PAPER—Chairman, George D. Bearce '11, Maine Seaboard Paper Co., Bucksport.

CLASS SECRETARIES

1872—
1873—
1874—

Honors and Prizes Awarded

Members of Honor Societies arranged in order of their establishment at the University of Maine.

Members of Phi Kappa Phi

1938

Helen Derry Abbott, Portland; Ernest Eugene Adams, South Brewer; Sidney Alpert, Bangor; Francis Wilson Bradbury, Brewer; Minnie Estelle Brown, Waterville; Nelson Bradford Carter, Brewer; Rose Lilian Costrell, Bangor; Arthur Leroy Crouse, Crouseville; Madeleine Crawford Davis, Biddeford; Mildred Mae Dixon, South Eliot; Howard Mayo Goodwin, Brewer; Elizabeth Martha Gruginskis, Rumford; Virginia Smith Hall, Topsham; Alton Sinclair Ham, Bangor; Ida Mae Hart, Milbridge; Miriam Ada Hilton, Mercer; Francis Clough Jones, Orono; Frances Fern Lannon, Roslindale, Mass.; Alice Mary Lerner, Melrose, Mass.; Joseph Henry Lewis, Springfield; Leo Lee Lieberman, Bangor; Arland Ritchie Meade, Auburn; Evelyn Adriance Miles, Orono; Althea Hope Millett, Norway; George Edwin Philbrook, Tenafly, N. J.; Mary-Helen Raye, Eastport; Richard Watt Raymond, St. Albans, Vt.; Cora Edra Sharon, Wrentham, Mass.; James Howard Siegel, Bangor; Frances Sargent Smith, South Portland; Edith Louise Thomas, Skowhegan; George Louis Tsoulas, Bangor; Sherman Vannah, Waldoboro.

Members of Alpha Zeta

1938

Ronald Eugene Barnes, Fort Fairfield; Arthur Leroy Crouse, Crouseville; Lester Albert Felt, Bryant Pond; George Turner Fowler, Fort Fairfield; Richard Woodman Gerry, Lewiston; Earle Edwin Gray, Anson; Waldo Flanders Hardison, Caribou; Francis Clough Jones, Orono; Henry Francis Lowe, Brooks; Arland Ritchie Meade, Auburn; Oliver Meader Neal, Jr., North Berwick; Norman Renfrew Ness, Auburn; John Wesley Oliver, Orono; Albert Llewellyn Owens, Portland; Thomas William Owens, Jr., Portland.

1939

Thomas Levi Barker, Vassalboro; Dana Edgecomb Drew, Patten; John Sherwood Edwards, Bridgeport, Conn.; Walton Earle Grundy, Auburn; Robert Edward Hemingway, Caribou; Herbert Arthur Leonard, Thorndike; Wendell Walker Smith, Presque Isle; Roger Maxim Stinchfield, Wayne.

1940

Myron Stewart Gartley, Presque Isle; Walter Edward Hanley, Orono; Joseph Leonard Harrington, Patten; Donald Calvin Smith, Easton; Ralph Getchell Smith, Exeter.

Members of Tau Beta Pi

1938

Ernest Eugene Adams, South Brewer; Ernest Frederick Andrews, Ticonderoga, N. Y.; Ralph William Butler, South Berwick; Charles Yetts Cain, Portland; Nelson Bradford Carter, Brewer; James Robert DeCoster, South Portland; Albert Martin Ellingson, Milo; Amasa Stanley Getchell, Bangor; Howard Mayo Goodwin, Brewer; Karl Newcomb Hendrickson, Brewer; Erastus Eugene Holt, Portland; Joseph Henry Lewis, Springfield; Dwight Elmer Lord, Camden; George Edwin Philbrook, Tenafly, N. J.; Richard Watt Raymond, St. Albans, Vt.; Sherman Vannah, Waldoboro; Kenneth Bradford Young, Sherman Mills.

1939

Wilfred Estey Bettoney, Wollaston, Mass.; Louis Charles Costrell, Bangor; Robert Wendell Doe, Bingham; Alan Fred Kirkpatrick, Old Orchard Beach; William Birney Page, Sebago Lake; Alexander Hinds Raye, Eastport; John Franklin Raye, Eastport; Frederic Hastings Stetson, Bangor; John Franklin Whitney, Presque Isle.

Members of Xi Sigma Pi

1938

Douglas Raymond Best, St. Albans, Vt.; Ralph Edward Clifford, Dexter; Louis Benjamin Prahar, Englewood, N. J.; John Buchanan Ross, Bridgeport, Conn.

Three-Year Scholarship—Calvin Brackett Sewall, Wilton High School, Wilton.

Two-Year Scholarship—Harry Cope, Portland High School, Portland.

One-Year Scholarship—Frank Eugene Brewster, South Portland High School, South Portland; George Oscar Chase, Stearns High School, Millinocket; Florence Adelle Hathaway, Bangor High School, Bangor; Phyllis Muriel King, Brunswick High School, Brunswick; Warren Batchelder Randall, Lewiston High School, Lewiston.

The Hovey Memorial Scholarships—Robert Wendell Doe, Bingham; Albert Martin Ellingson, Milo; Philip Allan Hutchinson, Cape Elizabeth; Chester Warren Jones, Canaan; William Birney Page, Sebago Lake; Lawrence Arad Philpott, Patten.

The Charles H. Hood Fund Scholarships—Thomas Levi Barker, Vassalboro; Rockwood Norton Berry, Livermore Falls; Edward Jay Cook, Jr., Rutland, Vt.; John Sherwood Edwards, Bridgeport, Conn.; Herbert Arthur Leonard, Thorndike; Neal Harvey Walker, Wiscasset; Norman Eveleth Whitney, West Newton, Mass.

The W. H. Bowker Scholarships—Robert Arthur Elwell, Gorham; Donald Murray Kilpatrick, Caribou.

The Normal School Scholarships—Ervin Alexander Arbo, Brownville; James Arnold Harmon, Presque Isle; Hugh Edwin Young, Aurora.

The General Alumni Association Scholarship, Donald Benjamin Haskell, Portland.

The William Emery Parker Scholarship, Dana Edgecomb Drew, Patten.

The Charles H. Payson Scholarships—Lloyd Byron Crossland, Mexico; Rudolph Eric Haffner, Portland; Joseph Myron Johnson, Harrison; Martha Elizabeth Pierce, Guilford; Elizabeth Gould Rowe, Milo; Anna Margaretha Simpson, South Gray; John Franklin Whitney, Presque Isle.

The Bertha Joy Thompson Scholarships—Virginia Lucille Barstow, Brewer; Lester Duran Chipman, Mechanic Falls; Clifton Eugene Whitney, Winn; Ruth Howe Linnell, Pembroke; Alan Fred Kirkpatrick, Old Orchard Beach.

The Philip R. Hathorne Scholarships—Chester Warren Jones, Canaan; William Birney Page, Sebago Lake.

The New York Alumni Association Scholarship No. 1, Blanche Bertha Holman, Norwood, Mass.

The New York Alumni Association Scholarship No. 2, Louis Charles Costrell, Bangor.

The Kidder Scholarship, Walton Earle Grundy, Auburn.

The Chicago Alumni Association Scholarship, John Dunning Pennell, Jr., Portland.

The Pittsburgh Alumni Association Scholarship, Ruel Jotham Blackwell, Madison.

The Joseph Rider Farrington Scholarship, Donald Brooks Holyoke, Brewer.

The Stanley Plummer Scholarship, Douglas Harold Carr, Dexter.

The Penobscot County Alumni Association Scholarships—Charles Albert Pierce, Jr., Bangor; Ralph Getchell Smith, Exeter.

The Elizabeth Abbott Balentine Scholarship, Mary France Cooper, Beverly Farms, Mass.

The Class of 1905 Scholarship, John Dunning Pennell, Jr., Portland.

The Carrol C. Jones Scholarship, Robert Colin Kinghorn, Fitchburg, Mass.

The Ohio Alumni Association Scholarship, Artemus Edwin Weatherbee, Bangor.

The Boston Alumni Association Scholarships—Clark Glamis Kuney, Boston, Mass.;Wilfred Estey Bettoney, Wollaston, Mass.

The Lincoln County Alumni Association Scholarship, Boynton Locke, Jr., Boothbay Harbor.

The Northern Aroostook Alumni Association Scholarship, Charles Lancaster Weaver, Presque Isle.

The Rhode Island Alumni Association Scholarship, Richard Quigley, Providence, R. I.

The Waldo County Alumni Association Scholarship, Allan Eugene Piper, Troy.

The Worcester County Alumni Association Scholarship, Eleanor Louise Ward, Fitchburg, Mass.

The Western Massachusetts Alumni Association Scholarship, Carleton Hermon Clark, Springfield, Mass.

The Connecticut Alumni Association Scholarship, Marion Ruth Hines, Middletown, Conn.

The Knox County Alumni Association Scholarship, Wiljo Maurice Lindell, Warren.

The Piscataquis County Alumni Association Scholarship, Dora Louise Stacy, Shirley.

The Southern Kennebec Alumni Association Scholarship, Roger Maxim Stinchfield, Wayne.

The Portland Alumnae Scholarship, Eleanor Maxine Robertson, Portland.

The John M. Oak Scholarship Awards, John Norman Harris, Anson; Blanche Bertha Holman, Norwood, Mass.; Philip Allan Hutchinson, Cape Elizabeth.

The Class of 1911 Scholarship, Mary Ellen Buck, Monticello.

The Agricultural Club Scholarship, Walton Earle Grundy, Auburn.
The Maine Farm Bureau Fund Scholarship, Dana Edgecomb Drew, Patten.
The Class of 1909 Fund Scholarship, Paul Everett Browne, Bethel.
The Chi Omega Sociology Prize, Linnea Beatrice Westin, Bangor.
The Prize of the Class of 1873, Stanley Robert Holland, Portland.
The Alpha Omicron Pi Alumnae Prize, Mildred Cecelia White, Old Town.
Sigma Mu Sigma Award, Virginia Lucille Barstow, Brewer.
The Pale Blue Key Award, Jacob Serota, Portland.
The Students' Arts Club Scholarship, Ruth Alta Pagan, Deer Isle.
The Home Economics Club Award, Edith Irene Whitman, Stonington.
The Henry L. Griffin Prize in English Composition, Ruth Howe Linnell, Pembroke.
Special 1938-39 Senior Scholarship, Audrey Juanita White, South Portland.
The 1936-37 Senior Skull Society Award, Richard Peter Pippin, Bar Harbor.
The 1937-38 Sophomore Owl Society Award, Walter Lewis Stisulis, Mexico.
Franklin Danforth, Prize, Althea Hope Millett, Norway.
The Spanish Club Prize, Margaret Robinson Romero, Bangor.
The Robert C. Hamlet Prize, Clark Glanis Kuney, Boston, Mass.
The Claude Dewing Graton Prize, William Wardwell Treat, Winterport.
The Alpha Zeta Senior Award, Richard Woodman Gerry, Lewiston.
The Class of 1908 Commencement Cup, awarded jointly to the Class of 1875 and the Class of 1888.
Twentieth Century Commencement Cup, Class of 1916.
The Fraternity Scholarship Cup, Phi Eta Kappa.
The Freshman Scholarship Cup, Edward Little High School, Auburn.
The Charles Rice Cup, Phi Kappa Sigma.
The Washington Alumni Association Watch, John Robert Gowell, South Portland.
The Portland Alumnae Association Watch, Mary Louise Wright, Falmouth Foreside.

Commencement 1938

THURSDAY, JUNE 9

8:00 P.M. Commencement Ball—Alumni Memorial

FRIDAY, JUNE 10

11:00 A.M. Senior Class Meeting
1:30 P.M. Alumni Council Annual Meeting
1:45 Class Day Exercises—The Oval
3:30 Pageant—given by All-Maine Women—Coburn Green
4:30-6.00 President and Mrs. Hauck—"At Home"

SATURDAY, JUNE 11

7:45 A.M. Class Breakfasts
8:45 Reunion Class Meetings in headquarters rooms
9:00 Board of Trustees Meeting
10:00 General Alumni Association Annual Meeting—Alumni Hall
12:30 P.M. Alumni Luncheon—Alumni Memorial
2:00 University of Maine Foundation—Annual Meeting
2:00-2:30 Band Concert—The Oval
2:30-3:30 Frolics—The Oval
3:30-5:00 Alumnae Tea—Balentine Hall
3:45 Baseball Game—Alumni *vs.* Seniors—Baseball Field
5:30 Alumni Parade
6:00 Alumni Banquet—Alumni Memorial
9:15 Alumni Hop—Alumni Memorial

SUNDAY, JUNE 12

10:30 A.M. Baccalaureate Service—Alumni Memorial
6:45 P.M. Alumni-Senior Sing—The Oval

MONDAY, JUNE 13

9:30 A.M. Commencement Exercises—Alumni Memorial

Degrees Conferred, 1938

College of Agriculture

Bachelor of Science

IN AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

Gilbert Merrill Brown ..... Gloucester, Mass.
Basil Sterling Fox ..... Washburn
Waldo Flanders Hardison ..... Caribou
Francis Clough Jones, *With High Distinction* ..... Orono
Earl Edward Leavitt ..... Wytopitlock
Henry Francis Lowe ..... Brooks
James Archibald Marr ..... Millinocket
Norman Renfrew Ness ..... Auburn
Philip Simeon Nightingale ..... Fort Fairfield
Albert Llewellyn Owens ..... Portland
Thomas William Owens, *With Distinction* ..... Portland
Philip Norris Rogers ..... Mars Hill
Frank Merton Tapley ..... Robinson's
Richard Harrison Varney ..... Jonesboro

IN AGRONOMY

Ronald Eugene Barnes ..... Fort Fairfield
George Turner Fowler ..... Fort Fairfield
Glenn Harold Mosher ..... North Jay
John Wesley Oliver ..... Orono
Randolph Hartwell West ..... North Berwick

IN ANIMAL HUSBANDRY

Arthur Leroy Crouse, *With Distinction* ..... Crouseville
Earle Edwin Gray, *With Distinction* ..... Anson
Alvin Kingsbury Hersey ..... North Waterford

IN BACTERIOLOGY

Ernest Hall Donagan ..... West Medford, Mass.

IN BOTANY

Elizabeth Livingstone ..... Winchester, Mass.
Oliver Meader Neal, Jr. ..... North Berwick

IN DAIRY HUSBANDRY

John Everett Barnard ..... Kittery
Lester Albert Felt ..... Bryant Pond
Arland Ritchie Meade, *With High Distinction* ..... Auburn
Henry Irwin Morse ..... Kittery

IN DAIRY TECHNOLOGY

Charles Augustus Fillebrown ..... Waterford

IN ENTOMOLOGY

James Lyle Bean ..... Easton
Richard Eaton Williams ..... Framingham Center, Mass.

IN FORESTRY

James Oliver Armstrong, Jr. ..... Norwich, Conn.
Russell Doe Bartlett ..... Rockland
Douglas Raymond Best ..... St. Albans, Vt.
Richard Furniss Burgess ..... Meriden, Conn.
William Follett Chapman ..... Portland
Gordon Libby Chute ..... Harrison
Ralph Edward Clifford ..... Dexter
Edward Sherburne Doubleday ..... St. Albans, Vt.
Richard Stephen Edwards ..... Malden, Mass.
Douglas Creighton Grant ..... Medford, Mass.
Stuart Pinkham Lane ..... Lincoln
Alexander Harry Laputz ..... Brooklyn, N. Y.
Charles Herman Lowe ..... Camden
Donald Babson Mayo ..... Providence, R. I.
Wilford Jewett Merrill ..... Solon
Roger Harry Morse ..... Northboro, Mass.
Edward Wiggin Pierce ..... Portland
Robert Hall Plimpton ..... Newton Centre, Mass.
Louis Benjamin Prahar ..... Englewood, N. J.
John Buchanan Ross ..... Bridgeport, Conn.
George Roundy ..... Walpole, Mass.

Robert Lendall Fuller.....Portland
Orin Jackson Higgins.....Mapleton
Ellen Bailey Hodgkins.....Bath
Robert Sylvanus Hussey.....Bangor
Jean Stafford Kent.....Bangor
Harry Thomas Lees.....Manchester, Mass.
Alice Mary Lerner, *With Highest Honors*.....Melrose, Mass.
Leon Bernard Levitan.....Brookline, Mass.
Elmer Nathan Lippa.....Peabody, Mass.
Marjorie Clara Lynds.....Kittery
Harold Havener McKeen.....Bangor
Charles Kennedy McKenzie.....Augusta
Robert George Parker.....Sherman Mills
Donald Glidden Poole.....Vinalhaven
Morris David Rubin.....Bangor
Elward Chaplin Sherry.....Portland
Edwin Fellows Tewksbury.....Orrington
Edith Louise Thomas, *With High Honors*.....Skowhegan
James Douglas Thompson.....South Bristol
George Edwin Timson, Jr.....Lynn, Mass.
George Louis Tsoulas, *With High Honors*.....Bangor
Arnold Leolin Veague.....Castine
Benjamin Fogg Viner.....Bangor
Murdoch Walker.....Millinocket
Philip Shepard Webber.....Belfast
Peter Zoidis.....Bangor

IN ENGLISH

Kenneth Stanford Blake.....Dexter
Azalea Ladner Boyer.....Kittery Point
Kenneth Brookes.....Rockville, Conn.
Barbara True Brown.....Bath
Olive Elizabeth Conley.....Ellsworth
Edwin Solomon Costrell, *With High Honors*.....Bangor
Grace Rodger Curtis.....Danforth
Elizabeth Beverly Drummond.....Orono
Raymond Edward Fiedler.....Orono
Mary Ella Ford.....Brooklin
Madison Shepherd Forde.....Kingston, N. Y.
Lorraine Webb Gross.....Auburn
Virginia Smith Hall, *With Honors*.....Topsham

Joseph Hamor Hamlin ..... Bar Harbor
Marion Estelle Hatch ..... Melrose, Mass.
Blanche B. Holman ..... Norwood, Mass.
Helen Baker Lewis ..... Bar Harbor
Leo Lee Lieberman, *With Honors* ..... Bangor
Carolyn Martha Long ..... Bangor
Martin Joseph McDonough, Jr. ..... Bangor
Lewis Alden Nightingale ..... Fort Fairfield
Richard Peter Pippin ..... Bar Harbor
William Clarence Saltzman ..... Bangor
Mary Regina Shay ..... Lewiston
Caleb Merritt Trott ..... Bath
William Everett Veague ..... Harborside
Margaret Ruth Williston ..... Bangor
Paul Campbell Woods ..... Newton Centre, Mass.

IN GERMAN

Moses Harold Lane ..... Mattapan, Mass.

IN GOVERNMENT

Leonard Irving Berkowitz ..... Mattapan, Mass.
Hamlin Miller Gilbert ..... Hartford, Conn.
Sewall Jerome Ginsberg, *With High Honors* ..... Old Town

IN HISTORY

Donald Walton Butler ..... Portland
John Eldridge Frost ..... York Village
Ernest York Rowe ..... Eliot
John Perkins Williams ..... Ogunquit

IN HISTORY AND GOVERNMENT

Mary Elizabeth Leighton ..... Alfred
Geneva Helen Penley ..... Portland
George William Yeaton ..... Farmington

IN MATHEMATICS

Hester Anita Billings ..... Bangor
James Hammond Flynn ..... Machiasport
Wallace Fred Gleason, Jr. ..... South Portland

HAROLD MORRIS GRODINSKY ..... Bangor
RICHARD WYMAN HEALY ..... Augusta
NANCY HENNINGS ..... Oakland
SIDNEY NATHANIEL HURWITZ ..... Roxbury, Mass.
HAZEL ELIZABETH LUNDY ..... Saco
ANNA JEAN MITCHELL ..... Bar Harbor
VINCENT DICKEY STROUT ..... Jay
FESTUS GEORGE WATSON ..... Portland

IN MUSIC

EVELYN ADRIANCE MILES, *With High Distinction* ..... Orono

IN PSYCHOLOGY

ERNESTINE ELIZABETH ANDREWS ..... Bingham
MARGARET BASSETT ..... Westbrook
SYLVIA ESTHER COHEN ..... Bangor
LINCOLN FISH ..... Concord, Mass.
STANLEY FUGER, JR. ..... Cape Elizabeth
CAROLYN PERKINS HANSCOM ..... Ogunquit
DIANA ELIZABETH HIGHT ..... Skowhegan
MIRIAM LANDON ..... Bangor
CORA EDRA SHARON, *With High Honors* ..... Wrentham, Mass.
LOUIS SMITH ..... Portland
ELOISE SMITH YOUNG ..... Fort Fairfield

IN ROMANCE LANGUAGES

LESLIE BROOKES ..... Rockville, Conn.
MILDRED EVELYN DAUPHINEE ..... Bangor
MILDRED MAY DIXON, *With High Distinction* ..... South Eliot
IDA MAE HART, *With High Distinction* ..... Milbridge
MARGUERITE MARY PICARD ..... Augusta
ARMANDO ARNALDO POLITO ..... Portland
HELEN PRINCE REILEY ..... Portland
PRISCILLA ANNE MARIE TONDREAU ..... Brunswick
ROSE FRANCES WHITMORE ..... Rockland

IN ZOOLOGY

SIDNEY ALPERT, *With Distinction* ..... Bangor
LOUIS NICHOLAS BARONE ..... Quincy, Mass.
FRANCIS WILSON BRADBURY, *With Highest Distinction* ..... Brewer
GEORGE CURTIS CALDERWOOD ..... Roxbury, Mass.

John Barker DeLong ..... Glens Falls, N. Y.
Theodore Parker Harding ..... New York, N. Y.
Arthur Webster Hodges, Jr. ..... Newton Centre, Mass.
Edmond Taylor Laing ..... Bangor
Frances Fern Lannon, *With Highest Honors* ..... Roslindale, Mass.
Mabel Eleanor Mayhew ..... Old Town
Mary-Helen Raye ..... Eastport
Clayton Marshall Robertson ..... Caribou
Catharine Lancaster Rowe ..... Bangor
Thomas Rae Shannon, Jr. ..... Glens Falls, N. Y.
James Howard Siegel, *With Distinction* ..... Bangor
Richard Merle Stevens ..... Bangor
William Raymund Thompson, Jr. ..... Caribou

School of Education

Bachelor of Arts in Education

Howard Douglass Fowlie ..... Monroe
Reginald Lester Hargreaves ..... New Bedford, Mass.
Donald Esty McGraves ..... Brunswick

Bachelor of Science in Education

Helen Derry Abbott, *With Highest Distinction* ..... Portland
Minnie Estelle Brown, *With Distinction* ..... Waterville
Martha Marden Chase ..... Bucksport
Yvonne Daigle ..... St. Francis
Madeleine Crawford Davis, *With High Distinction* ..... Biddeford
Maxine Frances Gagnon ..... Eagle Lake
Helen Gertrude Harding ..... Stockton Springs
John Franklin Harriman ..... Bar Harbor
Eloise Audine Hutchinson ..... Skowhegan
Gerard William Ingalls ..... Bar Harbor
Margaret Wilson Lowell ..... Machias
Helen Gertrude McCobb ..... Lincolnville Center
Ruth Helen McLaughlin ..... Washburn
James Allan McLean, Jr. ..... Bangor
Barbara McLeary ..... Farmington
Leon Tibbetts Malcolm ..... Augusta
Madeleine Elizabeth May ..... Brooklyn, N. Y.
Marion Jane Moan ..... Machias

Margaret Glenn Munson.....Windham, N. Y.
Natalie Eva Nason, *With Distinction*.....Bangor
Bertha Lavina Paul.....Skowhegan
Florence Mildred Phillips.....Oneonta, N. Y.
Gordon Byron Raymond.....Robinson's
Doris Jeannette Richardson.....Bangor
George Ronald Shaw.....South Casco
Harry Wallace Smith.....Bucksport
Warren Eldred Stevens.....Skowhegan
Ralph Chester Sturke.....Pembroke
Lelia Knowles Tripp.....Salisbury Cove
William Clarence Webber, Jr.....Bar Harbor
Margaret Crosskill Wood.....Presque Isle

Bachelor of Science in Commercial Education

Helen Elizabeth Wong.....Bangor

College of Technology

Bachelor of Science

in chemistry

Amasa Stanley Getchell.....Bangor
John Francis Hooper.....Old Town
William Penn Hussey.....Old Town
Edward Osgood Merrill.....Orono
George Edwin Philbrook, *With High Distinction*.....Tenafly, N. J.
Edwin Knight Stromberg.....North Berwick

in chemical engineering

Ernest Eugene Adams, *With High Distinction*.....South Brewer
Elwood Prince Additon.....Rumford
Nelson Bradford Carter, *With Highest Distinction*.....Brewer
Howard Jefferson Crafts.....Portland
John Daniel Haggett.....North Edgecomb
Moses Stuart Lord.....Old Town
Ernest John Reidman.....Auburn
Charles Stanward Russell.....Stillwater
Arthur Grant Smith.....New Gloucester
Hiram LeRoy Smith, Jr.....Huntington, W. Va.
Lester Joseph Tarbell.....Smyrna Mills

IN CIVIL ENGINEERING

Donald Sanford Adams ..... Watertown, Mass.
Richard Horn Britt ..... Rockland
Lloyd Fremont Brown ..... Augusta
Ralph William Butler ..... South Berwick
Robert Venn Carr ..... Bridgeport, Conn.
Douglas Dingwall ..... Presque Isle
Lewis William Edwards ..... South Portland
Alton Sinclair Ham, *With High Distinction* ..... Bangor
Richard Edmund Hayes ..... Lewiston
Leland Vernon Page ..... Easton
Henry Arnold Spavin ..... West Roxbury, Mass.
Fred Albert Spence ..... Springvale
Joseph Ayer Stevens ..... Lincoln
Kenneth Bradford Young, *With Distinction* ..... Sherman Mills

IN ELECTRICAL ENGINEERING

Gerald Farrington Hart ..... Brewer
Erastus Eugene Holt ..... Portland
Richard Maxwell Ireland ..... Biddeford
Donald Palmer Kelley ..... South Portland
Harvey Carl Kenneson ..... Portland
Bartlett Kimball ..... Wollaston, Mass.
Joseph Henry Lewis, *With Distinction* ..... Springfield
Dwight Elmer Lord, *With Distinction* ..... Camden
Henry True Lowell, Jr. ..... Auburn
Sumner Hale Lull ..... Augusta
Thomas Elwin Lynch ..... South Portland
Lawrence Arad Philpott ..... Patten
Winslow Baker Smith ..... Brewer

IN GENERAL ENGINEERING

Howard Mayo Goodwin, *With Highest Distinction* ..... Brewer
Karl Newcomb Hendrickson ..... Brewer

IN MECHANICAL ENGINEERING

Vance Durgin Baker ..... The Forks
Stuart Graham Bryant ..... Newcastle
Irving Herbert Clement ..... Milo
Albert Martin Ellingson ..... Milo

Loran Radford Fairfield ..... South Portland
John Robert Gowell ..... South Portland
Robert Willis Harvey ..... New Haven, Conn.
Raymond Harold Hatt ..... Patten
Edward Whittum Larrabee ..... Belfast
Robert Morrill Loveless ..... Melrose, Mass.
Arthur Charles Moulton ..... West Newfield
Carl Chapin Osgood ..... Ellsworth
Walter Elden Smart, Jr. ..... Portland
William Arthur Smith ..... Dennysville
Alfred August Swenson ..... Millinocket
Norman Herbert Thompson ..... Biddeford
Robert Henry Toms ..... Portland
Edwin Parker Troland ..... Malden, Mass.
Sherman Vannah, *With Highest Distinction* ..... Waldoboro
Michael Wanagel ..... Newburyport, Mass.

IN PULP AND PAPER TECHNOLOGY

Ernest Frederick Andrews ..... Ticonderoga, N. Y.
Charles Yetts Cain ..... Portland
James Robert DeCoster, *With Distinction* ..... South Portland
Merrill Eldridge ..... Bangor
William George Ford ..... South Hadley Falls, Mass.
George Dourian Hill ..... Oakland
William French Hunnewell ..... Madison
Raymond Powell McGinley ..... Danvers, Mass.
Harold George Macklen ..... Hamilton, Ohio
Richard Watt Raymond, *With Distinction* ..... St. Albans, Vt.

The following senior who left the University for Military Service is graduated as of the Class with which he entered:

As of the Class of 1917

Simon Murray Wardwell ..... Auburn

Advanced Degrees

Master of Arts

IN ECONOMICS

Emanuel Wescourt (B.A., Syracuse, 1925) ..... Brooklyn, N. Y.
Thrift Education and School Banking in Continuation Schools

IN EDUCATION

THOMAS AUGUSTIN CALLAGHAN (B.S., Colby, 1923) ... Willimantic, Conn.
A Survey of Guidance Practices and Instruments among Forty-eight Public Secondary Schools in Connecticut

REBECCA HAZEL FEERO (B.A., Maine, 1934) ..... Bath
A Study of the Ability of Maine Ninth and Twelfth-Grade Pupils in English Grammar

FLORA HERMION LUTZ (B.A., Maine, 1937) ..... Old Town
The Status of Latin in the Secondary Schools of Maine

CLIFFORD JOSEPH MCGAUGHY (B.S., Colby, 1929) ..... Presque Isle
An Investigation of the Teacher's Contract in Maine

PERSIS ORMSBY (A.B., Boston University, 1927) ..... Plainfield, Conn.
A Survey of Extra-curricular Activities in the High Schools of Eastern Connecticut

EDWARD EVERETT RODERICK (B.A., M.A., Oskaloosa, 1912, 1913) ... Augusta
Elementary Teacher-Preparation Policies in Maine Normal Schools

CARROLL FREDERICK WILDER (B.A., Maine, 1926)
..... Cape May Court House, N. J.
An Investigation of Two Different Methods of Recording Laboratory Notes in High-School Chemistry

IN ENGLISH

CHARLES MUNRO GETCHELL (B.A., Maine, 1930) ..... Oakland
An Introduction to the Elizabethan Conception of Tragedy

HELEN MARIE O'BRIEN (A.B., Boston University, 1930) ... Somerville, Mass.
An Edition of Kaufman and Ryskind's *Of Thee I Sing*, with Introduction and Annotations

VELMA KATHERINE OLIVER (B.A., Maine, 1925) ..... Dexter
Thackeray's Critique of Upper Middle Class English Society

GEORGE BRADFORD WEATHERBEE, JR. (B.A., Maine, 1937)
..... Hampden Highlands
Contemporary Treatment of Fourteenth Century English Life: a Comparative Study of the Attitudes and Methods of Robert Mannyng, Langland, and Chaucer

IN HISTORY AND GOVERNMENT

ESTHER ALICE PECK (B.S. in Ed., Boston University, 1928)
..... Mt. Carmel, Conn.

A Conservative Generation's Amusements: a Phase of Connecticut's Social History

IN PULP AND PAPER TECHNOLOGY

WILLIAM MARTIN WEIL (A.B., Cornell University, 1937) ..... Brooklyn, N. Y.
An Investigation of Some of the Factors Causing Cockle and Curl in Sulphite Papers

IN SPANISH

ERMA ELIZABETH WHITE (B.A., Maine, 1929) ..... Winterport
Pio Baroja: An Appraisal Based Chiefly upon the *Trilogias* and the *Memorias*

MASTER OF SCIENCE

IN AGRONOMY

JOHN RAYMOND ARNO (B.S., Maine, 1936) ..... Dexter
A Study of the Silica-Sesquioxide Ratio in Profile Horizons of Some York County Soils

IN BACTERIOLOGY

LEO ALEXANDER DICK (B.S., Wisconsin, 1935) ..... Marshfield, Wis.
Some Factors Influencing Pigmentation in Bacteria

IN BIOCHEMISTRY

JENNIE AMABEL MCINTOSH (B.Sc., New Brunswick, 1936) ..... Bath, N. B.
Some Factors Affecting the Vitamin C Content of Tomatoes and Rutabagas

IN BIOLOGY

DEAN MANTER BAILEY (B.S., Maine, 1936) ..... Orono
A Study of Certain Characters Conditioning Tenderness in Sweet Corn

IN BOTANY

ALTON ERNEST PRINCE (B.S., Maine, 1936) ..... Orono
Gymnosporangium Rusts and Their Host Relationships in Maine

IN CHEMISTRY

ALBERT EDWARD EDWARDS (B.Sc., New Brunswick, 1936) ..... Orono
An Investigation of the Anodic Corrosion of Commercial Manganese during the Process of Electrolysis

IN DAIRY INDUSTRY

HAROLD WINSTON SMITH (B.S., Illinois, 1936) ..... Orono
The Effect of Short Wave Infra Red Rays upon Milk

IN HORTICULTURE

GAYLAND EARLE FOLLEY (B.S., Maine, 1937) ..... South Portland
An Investigation of the Nutritional Symptoms in the Carnation

IN MECHANICAL ENGINEERING

THERON ALONZO SPARROW (B.S., Maine, 1924) ..... Orono
An Investigation of the Cause of Erosive and Destructive Action Taking Place in the Gate-Ways of Ripogenus Dam

IN PHYSICS

THOMAS WHALEY MORRIS (B.S., Michigan State, 1936) .... Lansing, Mich.
An Investigation of the Effect of a Magnetic Field on the Raman Spectrum of Carbon Tetrachloride

IN WILDLIFE CONSERVATION

KARL ANDREW JACOBSON (B.S., Minnesota, 1936) ..... Eagle Lake, Minn.
Ruffed Grouse Census Methods, with an Evaluation of Those Adaptable to Northern New England

JOEL WHITE MARSH (B.S., Maine, 1935) ..... Portland
A Limnological Study of Anasagunticook Lake in Oxford County, Maine, in Relation to the Game Fish Population

DONAL FRANCIS O'BRIEN (B.S., Rhode Island State, 1936) ... Newport, R. I.
A Qualitative and Quantitative Food-Habit Study of Beavers in Maine

MASTER OF SCIENCE IN EDUCATION

SARAH COMFORT PIKE (B.S. in Ed., Maine, 1936) ... East Woodstock, Conn.
A Study of the Ability of Maine Ninth and Twelfth-Grade Pupils in Punctuation

ARTHUR ALTON WEBB (B.S. in Ed., Maine, 1937) ..... Brooks
An Analysis of Arithmetic Abilities and Disabilities of Pupils in Maine Secondary Schools

Professional Degree

CIVIL ENGINEER

CHESTER WENDELL CAMBELL (B.S., Maine, 1925) ..... Staten Island, N. Y.
A Discussion of the Methods Used in Constructing the Foundations for Morgan City, Louisiana, Highway Bridge

Certificate

IN THE TWO-YEAR COURSE IN AGRICULTURE

OTIS MARSHALL DAVIS ..... Caribou
ALTON LIVINGSTON DOLLOFF ..... Rumford Center
ERWIN LOVETT HEALD ..... Lincolnville
ALMON HOMER HUFF ..... South Portland
JOHN PHILIP JACOBS ..... Caribou
CHARLES HENRY KING, JR. ..... Brewer
ROBERT HILL PEARSON ..... Kennebunkport
LEONARD JAMES RENY ..... Waterville
FRANK ARTHUR SMITH, JR. ..... Presque Isle
GALE STICKNEY TORREY ..... Auburn
WILLIAM BELL WATKINS, JR. ..... Berryville, Va.
ADAM WINSLOW WILSON ..... Portland

General Honors

EDWIN SOLOMON COSTRELL	*High Honors*
SEWALL JEROME GINSBERG	*High Honors*
VIRGINIA SMITH HALL	*Honors*
FRANCES FERN LANNON	*Highest Honors*
ALICE MARY LERNER	*Highest Honors*
LEO LEE LIEBERMAN	*Honors*
CORA EDRA SHARON	*High Honors*
EDITH LOUISE THOMAS	*High Honors*
GEORGE LOUIS TSOULAS	*High Honors*

Departmental Honors

College of Arts and Sciences

IN ECONOMICS AND SOCIOLOGY

ALFRED FRANCIS CHATTERTON
ROSE LILIAN COSTRELL
ALICE MARY LERNER
EDITH LOUISE THOMAS
GEORGE LOUIS TSOULAS

IN ENGLISH

AZALEA LADNER BOYER

IN HISTORY AND GOVERNMENT

DONALD WALTON BUTLER
SEWALL JEROME GINSBERG
JOHN PERKINS WILLIAMS

IN MUSIC

EVELYN ADRIANCE MILES

IN ROMANCE LANGUAGES

MILDRED MAY DIXON
IDA MAE HART

IN ZOOLOGY

FRANCIS WILSON BRADBURY
JOHN BARKER DELONG
FRANCES FERN LANNON
MARY-HELEN RAYE
CATHARINE LANCASTER ROWE
JAMES HOWARD SIEGEL

College of Technology

IN CHEMICAL ENGINEERING

NELSON BRADFORD CARTER

IN CHEMISTRY

GEORGE EDWIN PHILBROOK

IN CIVIL ENGINEERING

ALTON SINCLAIR HAM

IN ELECTRICAL ENGINEERING

JOSEPH HENRY LEWIS
LAWRENCE ARAD PHILPOTT

IN GENERAL ENGINEERING

HOWARD MAYO GOODWIN

IN MECHANICAL ENGINEERING

STUART GRAHAM BRYANT
ALBERT MARTIN ELLINGSON
SHERMAN VANNAH

IN PULP AND PAPER TECHNOLOGY

JAMES ROB eCOSTER
RICHARD W RAYMOND

The following received commissions as Second Lieutenant Officers' Reserve Corps

INFANTRY

DUNCAN COTTING
MORRIS ALONZO ERNST
LORAN RADFORD FAIRFIELD
LINCOLN FISH

Stanley Füger, Jr.
Wallace Fred Gleason, Jr.
Joseph Hamor Hamlin
Richard Wyman Healy
Arthur Webster Hodges, Jr.
Charles Herman Lowe
Thomas Rae Shannon
Walter Elden Smart, Jr.
William Howard Ward
Festus George Watson

CHEMICAL WARFARE SERVICE

Lester Joseph Tarbell

Honorary Degrees

Edville Gerhardt Abbott, Doctor of Laws
Harold Henry Beverage, Doctor of Engineering
Walter Johannes Damrosch, Doctor of Music
Rachel Field, Doctor of Letters
John Ford, Doctor of Fine Arts
Olof Olsson Nylander, Master of Science
Robert Gordon Sproul, Doctor of Laws

Catalog of Students

Major subjects are indicated as follows: Ae. Agricultural Education, Ag. Agronomy, Agr. Agriculture, An. Animal Husbandry, Ba. Business Administration, Bc. Biological Chemistry, Bl. Biology, Bt. Botany, By. Bacteriology, Ch. Chemistry, Ch.Eng. Chemical Engineering, Ce. Civil Engineering, Cl. Classics, Dh. Dairy Husbandry, Di. Dairy Industry, Dr. Drama, Dt. Dairy Technology, Ed. Education, Ee. Electrical Engineering, Eh. English, En. Entomology, Eng. Engineering (Course not specified), Eng.Ps. Engineering Physics, Es. Economics, Fm. Agricultural Economics and Farm Management, Fr. French, Fy. Forestry, Ge. General Engineering, Gm. German, Gt. Government, Hy. History, He. Home Economics, Ht. Horticulture, Jn. Journalism, Lt. Latin, Mc. Music, Me. Mechanical Engineering, Ms. Mathematics, Pa. Pulp and Paper Technology, Pc. Physiological Chemistry, Pg. Physiology, Ph. Poultry Husbandry, Pl. Philosophy, Pp. Plant Pathology, Ps. Physics, Py. Psychology, Rl. Romance Languages, Sy. Sociology, Wc. Wildlife Conservation, Zo. Zoology. Chemistry in the College of Arts and Sciences is indicated by Ch.A.

GRADUATE STUDENTS

Alfonso, José Sto. Tomas, B.S., Ee. *Pasig, Rizal, P. I.* 25 Grove Street
University of the Philippines, 1929

Anderson, Frank Abel, A.A., B.S., Ch.Eng. *Bridgeport, Conn.* 43 Peters Street
Junior College of Connecticut. 1934;
University of Southern California, 1936

Barnes, Ronald Eugene, B.S., Ag. *Fort Fairfield* Φ Η Κ House
Maine, 1938

Beal, Forrest Clem, A.B., Ed. *Bangor*
Bowdoin, 1927 41 Thirteenth Street, Bangor

Bennett, Earl Freeman, B.S., S.M., Ce. *Orono* 4 Middle Street
Maine, 1928; Massachusetts Institute of Technology, 1930

Blackmer, Leroy Lewis, Jr., B.S., Ps. *North Brookfield, Mass.*
Massachusetts State, 1937 Κ Σ House

Bradford, Robert Bruce, B.S., Me. *Orono* 40 Penobscot Street
Maine, 1934

Buehrer, Bernardine, B.A., Eh. University of Texas, 1922	*Orono*	23 Bennoch Street
Carter, Nelson Bradford, B.S., Ch. Maine, 1938	*Brewer*	12 Brimmer Street, Brewer
Chester, Rebecca Mary, A.B., M.A., Py. Colby, 1933; Western Reserve, 1934	*Waterville*	Y.W.C.A., Bangor
Costrell, Edwin Solomon, B.A., Hy. & Gt. Maine, 1938	*Bangor*	233 Parkview Avenue, Bangor
Crandon, Harry Drew, B.S., Ch. Maine, 1929	*Stillwater*	Stillwater
Dike, Kenneth Wilcox, B.S., An. Vermont, 1936	*Bristol, Vt.*	25 Myrtle Street
Downs, Walter Alanson, B.S. in Ed., Ed. Maine, 1935	*Kenduskeag*	47 Kossuth Street, Bangor
Durick, Rosemary Beatrice, B.A., Zo. New Brunswick, 1938	*Newcastle, N. B., Canada*	36 College Road
Dusenbury, Margaret Winifred Loesch, B.S., Eh. Wisconsin, 1937	*Orono*	30 Crosby Street
Fry, James Howard, B.S., Bc. Pennsylvania State, 1938	*Harrisburg, Pa.*	4 Myrtle Street
Gashwiler, Jay Schooling, B.S., Wc. Oregon State, 1937	*Novinger, Mo.*	95 Mill Street
Getchell, Amasa Stanley, B.S., Ch. Maine, 1938	*Bangor*	267 Forest Avenue, Bangor
Getchell, John Simmons, B.A., By. Maine, 1936	*Oakland*	38 Oak Street
Ginsberg, Sewall Jerome, Gt. Maine, 1938	*Old Town*	144 Main Street, Old Town
Goodwin, Howard Mayo, B.S., Es. Maine, 1938	*Brewer*	119 Parker Street, Brewer
Gorham, Paul Raymond, B.A., Bt. New Brunswick, 1938	*Fredericton, N. B., Canada*	37 Pine Street
Ham, Alton Sinclair, B.S., Ce. Maine, 1938	*Bangor*	College Road
Hilton, Miriam Ada, B.S., He. Maine, 1938	*Mercer*	60 Park Street

Hobson, Maebelle Alberta, B.S., Ms. Bates, 1937	*Portland*	Colvin Hall
Johnson, Robert Holm, B.S., Wc. Idaho, 1937	*Moscow, Idaho*	95 Mill Street
Kao, Yong-Tsiang, B.S., M.S., Pa. University of Nanking, 1936; University of Michigan, 1938	*Hongkong, China*	430 College Road
Kelly, Donald Hoyt, B.S., Ch. New Hampshire, 1938	*Newton, N. H.*	43 Peters Street
Kroll, Henry Michael, A.B., Zo. Clark, 1938	*New York, N. Y.*	80 Forest Avenue
Lamson, Arroll Liscomb, B.S., Wc. Connecticut State, 1933	*Orono*	56 Forest Avenue
Lekberg, Howard Parker, B.S., Me. Worcester Polytechnic Institute, 1932	*Orono*	43 Pine Street
Lewis, Joseph Henry, B.S., Es. & Ba. Maine, 1938	*Springfield*	33 Main Street
Linden, Carl Arthur, B.S., Ee. Tufts, 1936	*Everett, Mass.*	27 Myrtle Street
McNeary, Matthew, B.S., Ce. Pennsylvania State, 1932	*Orono*	23 Spencer Street
Mansfield, Agnes Lucy, A.B., Zo. Smith, 1938	*New Haven, Conn.*	60 Park Street
Mills, Alice Lerner, B.A., Es. Maine, 1938	*Melrose, Mass.*	191 Center Street, Bangor
Montgomery, Robert Dudley, B.S., Wc. Minnesota, 1937	*St. Paul, Minn.*	80 Forest Avenue
Mundt, John Orvin, B.S., By. Wisconsin, 1938	*Watertown, Wis.*	25 Myrtle Street
Murphy, Elizabeth Florence, B.A., M.A., Pg. Maine, 1930, 1934	*Bangor*	57 Pearl Street, Bangor
Ogden, Edith Bolan, B.A., Bt. Maine, 1933	*Orono*	22 University Place
Oleson, Frederick Barbour, B.A., Ps. Colby, 1938	*Berlin, N. H.*	158 Main Street
Oliver, Velma Katherine, B.A., M.A., Eh. Maine, 1925, 1938	*Dexter*	South Hall
Philbrook, George Edwin, B.S., Ch. Maine, 1938	*Tenafly, N. J.*	43 Peters Street

Pope, Donald Bartlett, B.S., Di. *Peoria, Ill.* 25 Myrtle Street
University of Illinois, 1938

Rankin, Barbara, B.A., Eh. *Portland* 33 Bennoch Street
Jackson College, 1938

Rich, Avery Edmund, B.S., Pp. *Charleston* 151 Park Street
Maine, 1937

Rogan, Catherine Pauline, A.B., B.E., Ed. *Bangor* 79 Sanford Street, Bangor
College of St. Elizabeth, 1935, 1938

Rowe, Ernest York, B.A., Hy. *Eliot* 38 Oak Street
Maine, 1938

Sanderlin, Owenita Harrah, B.A., Eh. *Orono* 36 Main Street
American University, 1937

Saveraid, Joye Harold, B.S., Wc. *Huxley, Iowa* 25 Grove Street
Iowa State, 1938

Sawyer, Clayton Leonard, B.A., Ch. *Orono* Park Street
Maine, 1938

Sawyer, Ralph Albert, B.S., Ce. *Orono* 19 Oak Street
Norwich, 1925

Sibley, Charles Byron, B.S., By. *Stillwater* Stillwater
Maine, 1937

Smith, Hiram LeRoy, Jr., B.S., Ch.Eng. *Orono* A T Ω House
Maine, 1938

Smith, Lester Hurlin, B.S., Ag. *Buxton* Α Γ Ρ House
Maine, 1937

Todd, Frank Harold, B.S., M.A., Ms. *Topsham* R.F.D. #7, Bangor
Bowdoin, 1935; Maine, 1936

Wentworth, Ralph Eugene, B.A., Cl. *Bangor* 30 Linden Street, Bangor
Maine, 1937

Woodbury, Harold Mace, B.S., Ed. *Portland* 53 North Main Street
Maine, 1937

Wray, Ruth Arline, B.A., Ed. *Brewer* 46 Holyoke Street, Brewer
Maine, 1920

Ziemer, Charles Walter, B.S., Ch. *Ogden, Utah* 18 Penobscot Street
Utah State Agricultural College, 1938

SENIORS

Alley, John Chase, Fy. *Portland* Φ Η Κ House

Ames, Bertram Wendell, Ph. *Bangor*
106 Highland Street, Bangor

Anderson, Anna Mirdza, Eh.	*Derby*	Balentine Hall
Anderson, Evangeline Deborah, Sy.	*Monson*	Colvin Hall
Armstrong, Alma May, Rl.	*Portland*	87 Main Street
Bailey, Cora Alice, Zo.	*Waterville*	South Hall
Baker, Gwendolyn Marie, He.	*Brewer*	Balentine Hall
Barker, Thomas Levi, An.	*Vassalboro*	106 H. H. Hall
Bartlett, Ann Quincy, Ch.A.	*Sorrento*	Balentine Hall
Barton, Ruth Estelle, He.	*West Gray*	Balentine Hall
Bearce, Mary Leslie, Es.	*Bucksport*	Balentine Hall
Bell, Eleanor Lucille, He.	*Albany, N. Y.*	Balentine Hall
Bettoney, Wilfred Estey, Me.	*Wollaston, Mass.*	56 North Main Street
Blackwell, Ruel Jotham, Ce.	*Madison*	Φ M Δ House
Blake, Howard Francis, Me.	*Portland*	Θ X House
Blanchard, Charles Louis, Ch.	*Bangor*	48 Montgomery Street, Bangor
Bond, Helen Marden, Py.	*Bangor*	Balentine Hall
Borden, Marion Patricia, Eh.	*South Portland*	Colvin Hall
Bourgoin, Louis Joseph, Ed.	*Frenchville*	308 H. H. Hall
Boyer, Richard Porter, Jr., Ee.	*Newton, Mass.*	384 College Road
Bradford, Merrill Ray, Hy. & Gt.	*Bangor*	Φ Γ Δ House
Bramhall, Robert Billings, Me.	*Quincy, Mass.*	B Θ Π House
Brann, Leonard Maurice, Ph.	*North Whitefield*	35 Hill Street
Brastow, Vera Estelle, He.	*Brewer*	Balentine Hall
Browne, Paul Everett. Fm.	*Bethel*	Φ M Δ House
Buck, Embert Clason, Ag.	*Harrison*	25 Grove Street
Burke, Virginia, He.	*Whitman, Mass.*	Balentine Hall
Burns, George Elmer, Ed.	*Mexico*	12 Park Street
Burns, John Wesley, Ph.	*Union*	College Road
Buzzell, Mary Edith, He.	*Fryeburg*	Balentine Hall
Byer, Edwin, Zo.	*Bangor*	36 Essex Street, Bangor
Cahill, James Best, Fy.	*Haworth, N. J.*	K Σ House
Cail, Robert Small, Zo.	*Portland*	Σ A E House
Campbell, Josephine O'Brien, Zo.	*Machias*	Balentine Hall
Cassidy, Margaret Eileen, Ed.	*Bangor*	363 State Street, Bangor
Cates, Ethel Maxine, He.	*Thorndike*	Balentine Hall
Chamberlain, Austin Hunter, Me.	*Mt. Vernon, N. Y.*	72 Main Street
Chapman, Gordon Lewis, Fy.	*Portland*	Θ X House

Chapman, Paul S., Ed.	*Bethel*	25 Grove Street
Chase, Eva Isobel, Eh.	*Limestone*	Balentine Hall
Chick, Arthur Jesse, Jr., Ht.	*Monmouth*	Φ M Δ House
Chute, Laura Grace, He.	*Brewer*	Balentine Hall
Clark, Carleton Hermon, Ee.	*Springfield, Mass.*	Σ N House
Clark, Kenneth Edward, Fm.	*Fort Fairfield*	Φ H K House
Clement, Roger Conant, Dh.	*Monroe*	A Γ P House
Clifford, William Foster, Es.	*Westmount, Que., Canada*	A T Ω House
Collins, Frank Henry, Me.	*Bar Harbor*	Σ A E House
Colson, Vernita Gertrude, Ed.	*Stockton Springs*	60 Park Street
Cook, Robert Boone, Fy.	*Presque Isle*	A T Ω House
Cooper, Erwin Elling, Gt.	*Mattapan, Mass.*	T E Φ House
Cooper, Mary Eliza, Ed.	*Albion*	Balentine Hall
Corbett, Barbara, He.	*Orono*	Campus
Cormier, Everett Lawrence, Ed.	*Van Buren*	3 Park Street
Corrigan, Philip Aiken, Ch.Eng.	*Calais*	Θ X House
Costrell, Louis Charles, Ee.	*Bangor*	233 Parkview Avenue, Bangor
Cousins, Eleanor Allbee, Ed.	*East Blue Hill*	North Hall
Cox, Catherine Ella, He.	*Sea Cliff, N. Y.*	Balentine Hall
Crabtree, Kenneth Lester, Me.	*Union*	Kell Street
Craig, Philip Charles, Fm.	*Patten*	A T Ω House
Craig, William Henry, Fy.	*Bingham*	9 Forest Avenue
Cramer, Francis Leroy, Ce.	*Bristol*	89 State Street, Brewer
Cressy, Carlton Clark, Es.	*Millinocket*	52 North Main Street
Crocker, Richard Foster, Jr., Wc.	*Fort Kent*	A T Ω House
Crockett, Eleanor Mabel, Fr.	*Hopedale, Mass.*	Balentine Hall
Crosby, Osburn Ralph, Ed.	*East Millinocket*	Θ X House
Croteau, Dearnley, Es.	*Lisbon Falls*	384 College Road
Crowell, Samuel, III, Me.	*Marblehead, Mass.*	384 College Road
Cullinan, Robert Vincent, Zo.	*South Portland*	Φ Γ Δ House
Cunningham, James W., Me.	*Old Town*	36 Veazie Street, Old Town
Curran, Dennis Joseph, Gm.	*Bangor*	101 Fern Street, Bangor
Curran, Hazel Bernice, He.	*Milo*	North Hall
Currie, Charlotte Hope, Lt. & Fr.	*Hartland*	Balentine Hall
Currier, Doris Madeline, Ed.	*Oxbow*	Colvin Hall
Curtin, Timothy Francis, Fm.	*Boothbay Harbor*	Θ X House
Curtis, Elizabeth, He.	*Searsport*	Balentine Hall
Cyr, Edward Peter, Ag.	*Lille*	12 Park Street

Daigle, Clifford Lewellyn, Ed.	*Fort Kent*	Σ N House
Daigle, Marie Anne, Ed.	*Fort Kent*	100 Main Street
Davee, Pauline Weltha, Sy.	*Orono*	46 College Road
Davis, Carl Fremont, Jr., Me.	*Rumford*	K Σ House
Davis, Dorothy, He.	*Longmeadow, Mass.*	Balentine Hall
Day, Elroy Kenneth, Ce.	*North Berwick*	Σ A E House
Dean, Orris Lee, Jr., Ch.Eng.	*Derby*	2 Myrtle Street
Dean, Philena Emily, He.	*Waterville*	Balentine Hall
Demont, Ralph Lewis, Fy.	*Old Town*	33 Oak Street, Old Town
Dimitre, Charlotte Louise, He.	*Calais*	Balentine Hall
Dionne, George Edmond, Ed.	*Madawaska*	17 Margin Street
Dixon, Elizabeth Rachel, Es.	*Old Town*	29 South Fourth Street, Old Town
Doak, Carleton, Jr., Ce.	*Belfast*	12 Park Street
Doble, Elisabeth Jean, Py.	*Beverly, Mass.*	Balentine Hall
Dodge, Harland Laurell, Es.	*Hudson Falls, N. Y.*	Λ X A House
Doe, George Edward, Fy.	*Kezar Falls*	7 Forest Avenue
Doe, Robert Wendell, Pa.	*Bingham*	Φ M Δ House
Drew, Dana Edgecomb, Fm.	*Patten*	H. H. Hall
Dunbar, Marion Phoebe, He.	*Belfast*	Balentine Hall
Dyer, Allen Lyford, Py.	*Camden*	83 Park Street
Dyer, Hamilton Higgins, Jr., Me.	*Kennebunk*	Φ Γ Δ House
Dyer, Harold Jacobson, Wc.	*Gorham*	302 H. H. Hall
Dyson, Albert Orne, Pa.	*Stoneham, Mass.*	Σ X House
Edison, Harold, Ch.A.	*Brooklyn, N. Y.*	12 Pleasant Street
Edwards, John Sherwood, Dh.	*Bridgeport, Conn.*	Φ H K House
Epstein, Lucille Mae, Hy.	*Bangor*	298 Essex Street, Bangor
Ernst, Morris Alonzo, Ce.	*York Village*	A T Ω House
Estabrook, Harold Udell, Es.	*Calais*	Σ X House
Fales, Joan Elinor, Py.	*Waterville*	Balentine Hall
Farrin, Afton Holmes, Ht.	*South Bristol*	45 Mill Street
Farris, Robert Calvin, Jr., Ag.	*Union*	A Γ P House
Feero, Robert Clyde, Ch.	*Bath*	A T Ω House
Fitch, Bula Louise, He.	*New Sharon*	32 College Road
Fitch, Harlan Pratt, Fy.	*Groton, Mass.*	Stillwater
Fogg, Lucille Carroll, Rl.	*Bangor*	Balentine Hall
Folsom, Marie Theresa, He.	*Orono*	63 Forest Avenue
Fortier, Francis Brett, Fy.	*Dexter*	College Road
Friedman, Albert, Es.	*Bangor*	173 Broadway, Bangor

Gale, Eunice Marianne, Ms.	*Portland*	Balentine Hall
Gamage, Russell Wells, Me.	*Christmas Cove*	Δ T Δ House
Glines, Ella Mabel, Ed.	*Unity*	60 Park Street
Gloden, Felix Anthony, Ed.	*Mexico*	Stillwater
Glover, William Albert, Jr., Ce.	*Rockland*	Θ X House
Goodrich, Maison Keith, Fm.	*Patten*	A T Ω House
Goud, Allan Frederick, Es.	*Augusta*	Θ X House
Grace, Barbara, He.	*Lynnfield Center, Mass.*	Balentine Hall
Graffam, Robert Thomas, Ch.Eng.	*Portland*	51 North Main Street
Grange, Jean Isabelle, He.	*Smyrna Mills*	Balentine Hall
Grant, Philip Farnsworth, Fy.	*Cherryfield*	Σ X House
Grant, Theodore Hudson, Ee.	*Houlton*	47½ Mill Street
Green, Sybil Kent, Eh.	*Orono*	17 Spencer Street
Gregory, Philip Lawrence, Ce.	*North Weymouth, Mass.*	Σ A E House
Gregory, Ruth Evelyn, Ed.	*Rockland*	33 Bennoch Street
Groves, Stephen William, Me.	*East Millinocket*	Φ M Δ House
Grundy, Walton Earle, By.	*Auburn*	A Γ P House
Hall, Norman Charles, Ed.	*Dalton, Mass.*	50 Pine Street
Hall, Thomas William, Fm.	*Wiscasset*	Φ M Δ House
Halliday, Harry Horn, Fy.	*Newtonville, Mass.*	12½ Pleasant Street
Hannigan, Bernard Guy, Fm.	*Houlton*	A T Ω House
Harmon, James Arnold, Ed.	*Presque Isle*	28 Main Street
Harnden, Frederick Barker, Me.	*Rangeley*	K Σ House
Harriman, John Philip, Ee.	*Cherryfield*	Σ X House
Harris, Robert Tyler, Py.	*Salem, Mass.*	K Σ House
Harrison, Edna Louise, He.	*Newburgh, N. Y.*	Balentine Hall
Hart, Elmer Colburn, Fy.	*South Hope*	Σ A E House
Haskell, Donald Benjamin, Me.	*Portland*	University Cabin
Haskell, Priscilla Day, Eh.	*Bangor*	Colvin Hall
Hayes, Edward Keith, Zo.	*Orono*	Φ K Σ House
Haynes, Mildred Hamlin, Hy.	*South Waterford*	Colvin Hall
Hemingway, Robert Edward, Ag.	*Caribou*	Φ H K House
Hennessy, Charlotte Rose, He.	*Portland*	Balentine Hall
Henry, Mary Elizabeth, He.	*Thomaston*	Balentine Hall
Hill, Charles St. John, Me.	*Orono*	9 Kell Street
Hilton, William Rogers, Ce.	*Bangor*	Φ K Σ House
Hines, Dorothy Mildred, Hy.	*Middletown, Conn.*	Balentine Hall

Hodgdon, Kendrick Yale, Bt.	*Anson*	University Cabin
Holbrook, Charles Marsh, Ce.	*Watertown, Mass.*	395 College Road
Holmes, Richard, Fy.	*Northeast Harbor*	Β Θ Π House
Homans, Elizabeth West, He.	*Bangor*	Balentine Hall
Howard, Richard Homer, Fm.	*Sangerville*	Σ Χ House
Howard, Sheldon Kenneth, Me.	*North Monmouth*	University Cabin
Hoxie, Margaret Leonora, Py.	*Belfast*	Balentine Hall
Huff, Margaret Louise, He.	*Biddeford*	South Hall
Huntoon, Charles Rounds, Jr., Pa.	*Rumford*	Δ Τ Δ House
Jellison, Milton Sylvester, Es.	*Bangor*	279 Essex Street, Bangor
Johnson, Theresa Evelyn, Rl.	*South Portland*	Colvin Hall
Jones, Chester Warren, Ce.	*Canaan*	25 Grove Street
Kent, Frank Holmes, Ed.	*Wytopitlock*	25 Grove Street
King, Charlotte Edith, Eh.	*Bath*	Balentine Hall
Kirkland, Robert, Jr., Ee.	*Quincy, Mass.*	Β Θ Π House
Kirkpatrick, Alan Fred, Ch.	*Old Orchard Beach*	430 College Road
Kiszonak, Marion Margaret, He.	*Lisbon Falls*	Balentine Hall
Konecki, Leon Walter, Es.	*South Portland*	Σ Χ House
Kufel, Stacia Victoria, He.	*Shirley, Mass.*	South Hall
Kuney, Clark Glamis, Dr. (Eh.)	*Boston, Mass.*	Β Θ Π House
Kyer, Marguerite Edith, Py.	*Brewer*	236 Wilson Street, Brewer
Ladd, Edward Rankin, Py.	*Rockland*	Κ Σ House
Lamoreau, Jeanette, Ms.	*Presque Isle*	South Hall
Lancaster, Alden, Es.	*Presque Isle*	Α Τ Ω House
Lanigan, Edwin James, Ch.A.	*Belmont, Mass.*	Κ Σ House
Leavitt, Charles Ralph, Ed.	*West Enfield*	Φ Κ Σ House
Leavitt, Lois Priscilla, He.	*Orono*	7 Park Street
Leighton, Berenice Maude, Ms.	*Harrington*	Balentine Hall
Leonard, Herbert Arthur, Dt.	*Thorndike*	112 Oak Hall
Lewis, Laurice Ervin, Ed.	*Vassalboro*	25 Grove Street
Lippke, Arthur John, Jr., Fy.	*Jamaica, N. Y.*	Λ Χ Α House
Lovering, Francis Ward, Py.	*Tyngsboro, Mass.*	Σ Α Ε House
Lunt, Ferne Marguerite, Eh.	*Houlton*	Colvin Hall
McCarthy, William Edward, Fm.	*Rumford*	Κ Σ House
McCully, Helen Clarissa, Ed.	*Farmington*	South Hall

MacDonald, Reginald Peppard, Me.	*Lynn, Mass.*	Β Θ Π House
McDonough, William Thomas, Ce.	*Portland*	Θ Χ House
McKenzie, Melvin Almon, Me.	*Lewiston*	112 H. H. Hall
MacMillan, Granville Butman, Ed.	*Stillwater*	Stillwater
Maguire, Mary Virginia, Eh.	*Portland*	Balentine Hall
Mallet, Alfred Parker, Ms.	*South Portland*	Φ Γ Δ House
Marston, Merwin Abbott, Wc.	*East Waterford*	Φ Μ Δ House
Merrill, Leonard Carleton, Ba.	*Brewer*	R.D. #6, Brewer
Mersereau, Clayton Davis, Es.	*Sebago Lake*	Σ Ν House
Miller, Anita Elinor, Eh.	*Monmouth Beach, N. J.*	Balentine Hall
Miller, Roy Leighton, Fy.	*Quincy, Mass.*	Α Χ Α House
Millett, Elwood Dimock, Me.	*Norway*	Φ Μ Δ House
Milliken, Sewall Otis, Fm.	*Portland*	3 Park Street
Mitchell, Lillian Mae, Py.	*Orono*	14 Park Street
Monroe, Richard Anderson, Fy.	*Melrose, Mass.*	Β Θ Π House
Moore, Donald James, Ba.	*Bangor*	Σ Α Ε House
Morong, Raymond Lee, Ee.	*Madison*	Σ Ν House
Moulton, Marjorie Gloria, Rl.	*Randolph*	Balentine Hall
Moynihan, Julia Ruth, He.	*Madison*	Balentine Hall
Murphy, Gerald Eugene, Pa.	*Portland*	Κ Σ House
Nason, Beverly Ross, Ch.	*Old Town*	291 South Main Street, Old Town
Nelke, Arthur Wilber, Ed.	*Brewer*	49 Washington Street, Brewer
Nelson, Eunice Josephine, Eh.	*Old Town*	South Hall
Nelson, Raymond Lloyd, Fy.	*Concord, Mass.*	24 Oak Street
Norton, John Albert, Jr., Ed.	*Portland*	17 Margin Street
Norton, Raymond Francis, Es.	*Bangor*	24 Buck Street, Bangor
Norton, Weston Pike, Wc.	*Strong*	21 Mill Street
Ohnesorge, Louise Maxine, Eh.	*Kennebunkport*	Balentine Hall
Olds, Corwin Horace, Py.	*Rockland*	State Armory, Bangor
Orr, Mary Josephine, Eh.	*Old Town*	202 North Brunswick Street, Old Town
Orser, Margaret Rowen, Eh.	*Fort Fairfield*	Balentine Hall

Pagan, Ruth Alta, Hy. & Gt.	*Deer Isle*	The Maples
Page, William Birney, Ce.	*Sebago Lake*	University Cabin
Parkman, Ethelyn Arlene, He.	*Lynn, Mass.*	Balentine Hall
Parkman, Lauress Tibbetts, Me.	*Lynn, Mass.*	106 Oak Hall
Parlin, Clarence Owen, Ed.	*Starks*	102 Mill Street
Patrinelis, Charles Speros, Eh.	*Portland*	Θ X House
Patterson, Frederick Gillis, Eh.	*Castine*	Σ A E House
Pendleton, Brian, Eh.	*Lewiston*	Φ M Δ House
Perrin, Donald Herbert, Fm.	*Sherman Mills*	Φ H K House
Perry, Ida-May, Ed.	*Jefferson*	170 Forest Avenue, Bangor
Perry, John William, Es.	*Old Town*	474 Stillwater Avenue, Old Town
Phair, Willis Ralph, Fy.	*Limestone*	216 Stillwater Avenue, Old Town
Philbrook, Helen Marion, He.	*Shelburne, N. H.*	Balentine Hall
Pierce, Alice, Eh.	*Lunenburg, Mass.*	Colvin Hall
Pinkham, Thomas Sears, Jr., Es.	*Fort Kent*	Σ N House
Pratt, Elbert Sewall, Zo.	*Livermore Falls*	Θ X House
Pratt, Leonard Melvin, Ce.	*Greenville Junction*	A T Ω House
Quigley, Richard, Fy.	*Providence, R. I.*	B Θ Π House
Ramsdell, Ellis McNevin, Es.	*Rockland*	Σ X House
Raye, Alexander Hinds, Me.	*Eastport*	University Cabin
Raye, John Franklin, Me.	*Eastport*	University Cabin
Reed, Earle Duncan, Me.	*Augusta*	Φ K Σ House
Reid, Elizabeth Hunt, He.	*Augusta*	Balentine Hall
Rice, Margaret Louise, Eh.	*Orono*	16 Mill Street
Rich, Franklin Wilson, Dh.	*Charleston*	25 Grove Street
Rich, Robert Davis, Es.	*Portland*	Σ N House
Richardson, Alice Rowena, Ed.	*Fairfield*	462 Main Street, Bangor
Robbins, Bernard Clarence, Bc.	*Gardiner*	102 Oak Hall
Roberts, Gwilym Richard, Ed.	*Brownville*	395 College Road
Roberts, Marian Emerson, He.	*Kennebunk*	Balentine Hall
Rodgers, Newton Jennings, Ch.	*Portland*	Θ X House
Rosen, Antoria Shirley, He.	*New Sweden*	Colvin Hall
Ross, Muriel Evelyn, Ed.	*Sherbrooke, Que., Canada*	South Hall
Russell, Louis Reid, Hy. & Gt.	*Fort Fairfield*	25 Grove Street

Saex, Irving Gilbert, Es.	*Holyoke, Mass.*	14 Park Street
Sanborn, Jean Cummings, He.	*Bangor*	Balentine Hall
Sanborn, Jeannette Winter, Lt. & Fr.	*Bangor*	Balentine Hall
Sanborn, Ralph Durell, Me.	*Palmer, Mass.*	384 College Road
Sawyer, George Roberts, Ce.	*Old Town*	23 Bradbury Street, Old Town
Scavey, Barbara Eunice, Ed.	*Bangor*	52 Kossuth Street, Bangor
Sheraton, Robert Leonard, Me.	*West Newton, Mass.*	Θ X House
Shute, Harry David, Ce.	*Augusta*	B Θ Π House
Silver, Dorothy, Py.	*Bangor*	R.F.D. #7, Bangor
Sirois, William Joseph, Ag.	*Fort Fairfield*	K Σ House
Small, Gerald Turner, Es.	*Bangor*	18 Elizabeth Avenue, Bangor
Smith, Clement Harold, Dh.	*Monmouth*	Δ Γ P House
Smith, Francis Wager, Jr., Fy.	*Portland*	18 Oak Street
Smith, Mark Sheldon, Ee.	*Bangor*	16 Bower Street, Bangor
Smith, Merton Leverne, Ed.	*Bucksport*	Bucksport
Smith, Wendell Walker, Ag.	*Presque Isle*	28 Main Street
Speirs, Ernest Lincoln, Es.	*Westbrook*	Δ X Δ House
Spencer, Arlo Norman, Fy.	*Bradley*	Bradley
Sprague, Leon Chadbourne, Jr., Ed.	*Presque Isle*	28 Main Street
Sprowl, Leander Mayford, Ag.	*Searsmont*	Φ Π K House
Stacy, Dora Louise, Es.	*Shirley*	Balentine Hall
Stacy, Madge Elizabeth, Es.	*Shirley*	Balentine Hall
Stanley, Edward Carpenter, Ba.	*Rockville Centre, N. Y.*	43 Main Street
Staples, Stanley Wordsworth, Zo.	*Gardiner*	221 Elm Street, Bangor
Stetson, Frederic Hastings, Ec.	*Bangor*	24 Grove Street, Bangor
Stevens, Deborah Florence, He.	*Turner*	20 Forest Avenue
Stevens, Edith Harriet, Eh.	*Pleasant Point*	Balentine Hall
Stewart, Harriette Dalrymple, Py.	*Waterville*	Balentine Hall
Stinchfield, Roger Maxim, By.	*Wayne*	Δ X Δ House
Stinchfield, Venora Mary, Ed.	*Clinton*	South Hall
Stockholm, Harold Yager, Fy.	*Poughkeepsie, N. Y.*	Kell Street
Stoddard, James Merrill, Fy.	*Eastport*	80 North Main Street
St. Pierre, Janet Whiting, He.	*Bangor*	8 Hudson Street, Bangor
Strout, Donald Francis, Fy.	*Livermore Falls*	51 North Main Street
Sutter, Madeline, Ed.	*Presque Isle*	South Hall
Sutter, Mildred, Ed.	*Presque Isle*	South Hall
Szaniawski, Edward William, Fy.	*Scarsdale, N. Y.*	Δ T Ω House

Taylor, Marjorie, Ms.	*Bangor*	Colvin Hall
Temple, George Leonard, Zo.	*Lewiston*	Σ A E House
Temple, Philip Roswell, Hy. & Gt.	*Hopedale, Mass.*	Σ A E House
Testa, Patrick John, Ed.	*North New Portland*	Stillwater
Thomas, George Merrill, Ce.	*Rumford*	72 Main Street
Thomas, Richard Earl, Fy.	*Rockland*	K Σ House
Tibbetts, Earle Wilbur, Ce.	*Hallowell*	Δ T Δ House
Titcomb, Stanley Thayer, Ch.	*New Gloucester*	Φ K Σ House
Toner, Albert Plummer, Eh.	*Lewiston*	Σ A E House
Toothaker, Carl Russell, Me.	*Gardiner*	Δ T Δ House
Towle, Charles Hannaford, Ed.	*Portland*	64 Division Street, Bangor
Trafford, David White, Hy.	*Portland*	Φ K Σ House
True, Katherine King, Ed.	*Hope*	Colvin Hall
Turner, Francis Eugene, Py.	*Bangor*	32 Madison Street, Bangor
Turner, Harland Glidden, Zo.	*Augusta*	B Θ Π House
Vail, Dorothea Agnes, Py.	*Cornwall-on-Hudson, N. Y.*	South Hall
VanNostrand, Elaine Elizabeth, Eh.	*Somerville, N. J.*	48 Pierce Street
Verrill, Thomas Davis, Me.	*Cumberland Mills*	102 H. H. Hall
Walton, Mildred Hayes, Py.	*Lisbon*	Balentine Hall
Ward, Sheldon Leroy, Dt.	*Thorndike*	5 North Main Street
Ward, William Howard, Ce.	*North Uxbridge, Mass.*	A T Ω House
Washburn, Frank Johnson, Dh.	*Dover-Foxcroft*	3 Park Street
Watson, Reginald Leroy, Ed.	*Seal Harbor*	38 Grove Street
Weatherbee, Artemus Edwin, Hy. & Gt.	*Bangor*	B Θ Π House
Wenger, Karl Frederick, Fy.	*Springfield, Mass.*	17 Margin Street
Wentworth, Owen, Es.	*Kennebunkport*	B Θ Π House
Weymouth, Hilda Elzira, Ed.	*Morrill*	60 Park Street
White. Audrey Juanita, Eh.	*South Portland*	Colvin Hall
Whiteley, Albert Harry, Fy.	*Limerick*	9 Forest Aevnue
Whitney, John Franklin, Ch.	*Presque Isle*	35 Bradbury Street, Old Town
Whittredge, Barbara Fern, Sy.	*Ansonia, Conn.*	Balentine Hall
Williams, Thomas Arthur, Ee.	*Springfield, Mass.*	Σ X House

Wing, Merle Wesley, En.	*Old Town*	35 Bradbury Street, Old Town
Witherspoon, Donald Francis, Fy.	*North Haven*	80 North Main Street
Yozukevich, Algird George, Me.	*Auburn*	A T Ω House

JUNIORS

Adams, Edna Pearl, Py.	*South Brewer*	Balentine Hall
Adams, Norris Stanwood, Ba.	*Portland*	302 Oak Hall
Adkins, Harlow Dailey, Me.	*Norway*	A T Ω House
Akeley, Richard Warren, Fm.	*Presque Isle*	Φ Η Κ House
Albee, Burton Hathaway, Me.	*West Roxbury, Mass.*	Σ Χ House
Alpert, Myer, Hy. & Gt.	*Bangor*	137 State Street, Bangor
Andrews, Robert Golden, Zo.	*Gardner, Mass.*	3 Park Street
Andrews, Roger Stover, Es.	*Augusta*	Σ Χ House
Arbo, Ervin Alexander, Ed.	*Brownville*	25 Grove Street
Armstrong, Elizabeth Rae, He.	*Vanceboro*	South Hall
Arthur, Garfield Manning, Ee.	*Fitchburg, Mass.*	Β Θ Π House
Ashby, James Hanlon, Fm.	*Caribou*	Φ Η Κ House
Atwood, Robert Dixon, Hy. & Es.	*Portland*	306 Oak Hall
Bacon, Earl Grant, Me.	*Oakland*	25 Grove Street
Bahrt, Albert Edgar, Ge.	*North Islesboro*	Σ Α Ε House
Bailey, Frank William, Ed.	*LaGrange*	LaGrange
Bannigan, Marguerite Connor, Eh.	*Waterville*	Balentine Hall
Barrell, William Dwight, Fm.	*Turner*	Σ Α Ε House
Barstow, Virginia Lucille, Eh.	*Brewer*	52 Chamberlain Street, Brewer
Beardsell, Wallace Ames, Ch.Eng.	*Boston, Mass.*	202 H. H. Hall
Beckerman, Frank Maurice, Es. & Ba.	*Brookline, Mass.*	Τ Ε Φ House
Berce, Woodbury Lee, Jr., Fm.	*Washburn*	Φ Η Κ House
Bessey, Earle Dutton, Jr., Fy.	*Brooks*	Φ Η Κ House
Bickford, Priscilla Hope, Sy.	*Portland*	Balentine Hall
Bither, Donald Elmer, Ce.	*Linneus*	Σ Ν House
Blake, Gordon Robert, Ce.	*Brownfield*	College Road
Blake, Janet Emily, He.	*LaGrange*	40 College Road
Blom, Carl Johansen, Es. & Ba.	*Portland*	Θ Χ House

Bolan, John Everett, Ba.	*Winterport*	University Cabin
Bonney, Robert Harlan, Ge.	*Portland*	University Cabin
Bonville, Jeannette Louise, Fr.	*Presque Isle*	The Elms
Bouchard, Albert James, Ag.	*Caribou*	Δ T Δ House
Bouchard, Kenneth Joseph, Fm.	*Caribou*	Δ T Δ House
Bower, William Sumner, Me.	*Auburn*	Δ T Δ House
Brann, Edward Kenneth, Fy.	*Plainfield, N. J.*	Δ T Δ House
Breton, Leon Joseph, Ch.Eng.	*Rumford*	412 H. H. Hall
Bridges, Alton George, Ag.	*Mars Hill*	Φ H K House
Bronsdon, Harold Clark, Fy.	*Newton Centre, Mass.*	Λ X A House
Brooks, William King, Ht.	*Portland*	*22* Pond Street
Brown, Phyllis Esther, Sy. & Py.	*Ocean Park*	Balentine Hall
Brown, Thelma Nesta, Ed.	*Waterville*	23 Bennoch Street
Browne, Clark Wainwright, Ee.	*Silver Spring, Md.*	12 Park Street
Buck, Mary Ellen, He.	*Monticello*	Balentine Hall
Bucklin, Fred Robert, Wc.	*South Warren*	Φ K Σ House
Bull, Floyd Leland, Ag.	*Presque Isle*	Φ H K House
Bullard, Edward Chesseldon, Ba.	*Glens Falls, N. Y.*	A T Ω House
Burke, Gerard James, Fy.	*Concord, Mass.*	Σ X House
Burleigh, Robert Wentworth, Me.	*Boothbay Harbor*	A T Ω House
Burney, Lawrence Edward, Fy.	*South Portland*	Λ X A House
Burr, Kenneth George, Ht.	*Kennebunk*	Φ H K House
Buss, Frank Joseph, Fy.	*Central Falls, R. I.*	Λ X A House
Butler, Lyle Alton, Jr., Ch.Eng.	*Gardiner*	Δ T Δ House
Byram, Harry Melcher, Jr., Ee.	*Freeport*	Σ A E House
Calderwood, Carolyn Frances, He.	*Vinalhaven*	Balentine Hall
Calvo, Raymond John, Ht.	*New York, N. Y.*	*22* Pond Street
Caouette, Daniel Joseph, Hy.	*Skowhegan*	A T Ω House
Carlisle, John Davis, Es.	*Bangor*	Φ Γ Δ House
Carlson, Earl David, Ba.	*West Newton, Mass.*	B Θ Π House
Carr, Douglas Harold, Me.	*Dexter*	A T Ω House
Carter, Gordon Palmer, Ch.Eng.	*Brewer*	12 Brimmer Street, Brewer
Chandler, Theodore Pinkham, Pa.	*South Paris*	25 Grove Street
Chandler, William Heywood, Ge.	*Portland*	Σ X House
Charpentier, Allyn Eugene, Me.	*Flushing, L. I., N. Y.*	Σ N House
Checchi, Vincent Victor, Es.	*Calais*	Θ X House
Cheney, Margaret Laurie, Zo.	*Monmouth*	Colvin Hall
Citrin, Murray Maurice, Py.	*Portland*	35 Grove Street
Clark, Eldon Ralph, Fy.	*Dennysville*	Φ M Δ House
Clement, James Donald, Jr., Zo.	*Bangor*	77 Essex Street, Bangor

Clough, Charles Henry, Jr., Ba.	*Bluehill*	Σ X House
Coffee, Marjorie Eleanor, He.	*Clayville, N. Y.*	Balentine Hall
Coffin, Robert Tristram, Es.	*Brunswick*	Α Τ Ω House
Cogswell, Fred Melville, Jr., Hy.	*Danvers, Mass.*	Φ Γ Δ House
Cohen, Bernard, Me.	*Biddeford*	Τ Ε Φ House
Connolly, James Joseph, Ba.	*Portland*	Θ X House
Cook, Edward Jay, Jr., Dh.	*Rutland, Vt.*	Α Τ Ω House
Cook, William Sherwood, Me.	*Tenants Harbor*	Φ Μ Δ House
Cooper, Mary France, He.	*Beverly Farms, Mass.*	Balentine Hall
Cotting, Roger, Zo.	*Newton, Mass.*	Β Θ Π House
Craig, Robert Elmer, Ag.	*Westfield*	25 Grove Street
Crocker, Barbara Ellen, Ed.	*Fort Kent*	Colvin Hall
Crockett, Russell Edward, Ed.	*Houlton*	15 Park Street
Curran, Mary Cecilia, He.	*Lewiston*	South Hall
Currier, Stuart Lavers, Fy.	*Sandwich, Mass.*	Σ Ν House
Curtis, Philip Edward, Fm.	*Caribou*	312 Oak Hall
Cuzner, Wilbur Leonard, Ba.	*Belfast*	Φ Κ Σ House
Danforth, Norman Lewis, Jr., Ee.	*Bucksport*	Λ Χ Α House
Darveau, George Francis, Gt.	*Orono*	56 Park Street
Davis, Edward Everett, Ce.	*Burnham*	18 Oak Street
Day, Dorothy, Hy.	*Orono*	203 Main Street
Deering, Marjorie Bowman, He.	*Orono*	160 College Road
Dennis, Clarence Elmer, Ce.	*Rumford*	Φ Κ Σ House
Dequine, John Frederick, Wc.	*Long Branch, N. J.*	Α Τ Ω House
Derry, John Harry, Ch.Eng.	*Rumford*	Κ Σ House
Desjardins, Ruth Ursula, He.	*Old Town*	122 South Brunswick Street, Old Town
Digby, George Tabor, Fy.	*Collingswood, N. J.*	395 College Road
Dimick, William Carl, Wc.	*New Haven, Conn.*	7 Forest Avenue
Donovan, Alice Ann, Zo.	*Houlton*	Colvin Hall
Dore, Guy Frederick, Fy.	*Monson*	Σ Ν House
Dow, Dorrice Helen, He.	*Bangor*	267 Pine Street, Bangor
Dow, Loren Woodbury, Sy.	*Bangor*	359 Main Street, Bangor
Duby, Carleton Paul, Fy.	*Bradley*	Bradley
Duplisse, Kathleen Esther, Rl.	*Old Town*	156 Stillwater Avenue, Old Town

Dyer, Jane, Py.	*Framingham, Mass.*	Balentine Hall
Dyer, Richard Charles, Fm.	*Portland*	Σ A E House
Dyke, Ronald Arno, Me.	*Livermore Falls*	Σ A E House
Ebbeson, Helma Katrina, Hy.	*Bangor*	South Hall
Ela, Benjamin Walter, Jr., Ch.Eng.	*North Anson*	87 Park Street
Ellis, Ernest, Hy.	*Orono*	29 Park Street
Emery, Mark Peter, Jr., Ch.Eng.	*Bangor*	Λ X A House
Eveleth, Lawrence Nathaniel, Ag.	*Auburn*	31 Hill Street
Farrar, Herbert Wendell, Ee.	*Hingham, Mass.*	A T Ω House
Fay, Norman Frederick, Ba.	*Needham, Mass.*	K Σ House
Fessenden, Ruth Natalie, Sy.	*Portland*	Colvin Hall
Files, Maynard Whitney, Fy.	*Portland*	Φ K Σ House
Finks, Marcia Jannette, He.	*Portland*	Balentine Hall
Finnigan, William Joseph, Me.	*New Haven, Conn.*	Δ T Δ House
FitzGerald, Marion Hannah, Eh.	*Newburgh, N. Y.*	Balentine Hall
FitzPatrick, James Joseph, Ba.	*Marblehead, Mass.*	402 H. H. Hall
Flanagan, Eileen Mary, He.	*Bangor*	207 Maple Street, Bangor
Freeman, Josephine Anne, Ch.A.	*Portland*	South Hall
Gardner, Howard Delbert, Es.	*East Millinocket*	Φ M Δ House
Gartley, Myron Stewart, Ag.	*Presque Isle*	Φ H K House
Gates, Stanley Richard, An.	*South Paris*	A Γ P House
Gavett, Andrew Willard, Es.	*Dennysville*	88 Park Street
Gerrish, Harold Aldrich, Ps.	*Lisbon Falls*	212 H. H. Hall
Gilpatrick, Arlo Eugene, Me.	*Mars Hill*	Φ M Δ House
Glasser, Joseph Hermon, Es. & Gt.	*Roxbury, Mass.*	14 Park Street
Gogan, Patricia Kathryn, Rl.	*Bangor*	R.F.D. #7, Bangor
Golden, Francis Patrick, Fy.	*Hampden Highlands*	17 George St., Bangor
Golden, Miriam Natalie, Sy.	*Bangor*	326 State Street, Bangor
Goldsmith, Richard, Ba.	*Salem, Mass.*	Φ M Δ House
Goodrich, William George, Fy.	*Morrisville, Vt.*	395 College Road
Gotlieb, Peter, Hy. & Gt.	*Bangor*	121 Grove Street, Bangor
Grant, Ralph Tozier, Ag.	*Presque Isle*	45 Mill Street
Gray, Douglas Elliot, Fy.	*Warren*	Φ K Σ House
Gray, Gooden, Me.	*South Brooksville*	56 North Main Street
Greene, Leon Ardane, Fy.	*Auburn*	Λ X A House
Grimmer, Stewart William, Ba.	*Portland*	Φ Γ Δ House

Grindle, Mary Arline, Eh.	*Bucksport*	154 Stillwater Avenue, Old Town
Gross, Stephen Keith, Me.	*Camden*	Φ K Σ House
Hall, Marguarite Lucile, He.	*Orono*	24 Crosby Street
Halliwill, Eugene Herbert, Me.	*Portland*	Σ N House
Hamilton, Robert John, Me.	*Madison*	15 Park Street
Hanley, Walter Edward, Fm.	*Orono*	48 Mill Street
Hannan, Hazen Betford, Ch.Eng.	*Liberty*	25 Grove Street
Harlow, Laurence Joseph, Ch.Eng.	*Barre Plains, Mass.*	Δ T Δ House
Harrington, Joseph Leonard, Ag.	*Patten*	University Cabin
Harris, John Norman, Ce.	*Anson*	Φ M Δ House
Harris, Louis Tolman, Fm.	*Milo*	K Σ House
Hart, Ann Arlene, He.	*South Hope*	Balentine Hall
Hartwell, Henry Lloyd, An.	*Stetson*	Farm Boarding House
Hatch, William Henry, Fy.	*Dark Harbor*	University Cabin
Hauck, Margaret Ernestine. Eh.	*Orono*	Campus
Hawes, Emil Franklin, Ce.	*Bangor*	32 Royal Road, Bangor
Heald, Erwin Lovett, Ag.	*Lincolnville*	83 Park Street
Hebel, Richard Edwin, Ce.	*Brewer*	178 Parker Street, Brewer
Henderson, Arthur Alexander, Ed.	*Anson*	102 Mill Street
Hennessy, Louis Daniel, Ch.Eng.	*Brewer*	18 High Street, Brewer
Heughan, Herbert Milton, Ms.	*Bangor*	41 Mill Street
Higgins, Harold Donham, Ce.	*Lewiston*	Σ A E House
Higgins, Raymond Dyer, Zo.	*Dennysville*	Φ K Σ House
Hinckley, Irvia Louise, Py.	*Bluehill*	Balentine Hall
Hinkley, Philip Joseph, Ch.Eng.	*Cumberland Mills*	K Σ House
Holland, Stanley Robert, Me.	*Portland*	Σ X House
Holmes, Jane, Zo.	*West Winfield, N. Y.*	Balentine Hall
Holt, Fred Edward, Fy.	*Oxford*	64 Hill Street
Howard, Clayton Wendell, Fm.	*North Monmouth*	148 College Road
Howard, Preston Oliver, Me.	*Rumford*	Φ Γ Δ House
Howe, Louis William, Jr., Ce.	*Greene*	111 Park Street
Hoyt, Rachel Elzena, Ed.	*Easton*	Forest Avenue
Hunt, Orman Pearl, Dh.	*Clinton*	A Γ P House
Hunter, James Harold, Me.	*West Roxbury, Mass.*	Θ X House
Hurley, Edith Mae, Ms.	*Skowhegan*	The Elms
Hutchinson, Philip Allan, Me.	*Cape Elizabeth*	7 Park Street

Jackman, Hope Adelaide, Ed.	*Orono*	College Road
Jackman, Mary Sylvia, He.	*Mount Vernon*	South Hall
Jackson, Floyd Frederick, Zo.	*Rumford*	Φ K Σ House
Jellison, Pauline Winifred, Eh.	*Bangor*	341 French Street, Bangor
Jewett, George Herbert, Jr., Fm.	*Bucksport*	3 Park Street
Johnson, Elspeth Burnett, He.	*Gloucester, Mass.*	Balentine Hall
Johnson, Joseph Myron, Fm.	*Harrison*	25 Grove Street
Johnson, Marjorie Lois, Eh.	*Millinocket*	Colvin Hall
Johnson, Paul Leslie, Fm.	*Brooks*	51 North Main Street
Johnson, Stanley Fairfield, Fm.	*Brunswick*	K Σ House
Johnston, Frederick John, Ba.	*Bangor*	Φ Γ Δ House
Johnston, Raymond Randall, Ba.	*Fort Fairfield*	Φ H K House
Jones, Franklyn Lewis, Fy.	*South Portland*	Φ Γ Δ House
Jones, Mary Elizabeth, He.	*Mexico*	Balentine Hall
Jordan, John Haskell, Fm.	*Fryeburg*	A T Ω House
Judkins, Albert Edwards, Ph.	*Upton*	A Γ P House
Kane, Thomas Franklin, Jr., Zo.	*Portland*	Θ X House
Keenan, William Patrick, Ch.Eng.	*Cape Elizabeth*	Φ Γ Δ House
Kennedy, Dana Forrest, Ed.	*Bangor*	49 Thirteenth Street, Bangor
Kennedy, Mary Charlotte, He.	*Monmouth*	South Hall
Kenney, Howard Marshall, Ee.	*Millinocket*	Φ M Δ House
Kent, Rachel Woodman, He.	*Bangor*	Colvin Hall
Keyes, Allston Prentice, Ch.Eng.	*Washington, D. C.*	B Θ Π House
Kierstead, Elsie Leilla, Ed.	*Bluehill*	Spring Street, Stillwater
Kimball, Vernon Lord, Ce.	*Sangerville*	College Road
Knobler, Abraham, Pa.	*Jamaica, N. Y.*	T E Φ House
Knowlton, Charles Wentworth, Sy.	*Carmel*	Θ X House
Knowlton, Robert Canfield, Es.	*Westbrook*	A X A House
Kruse, Elizabeth Marie, He.	*Bangor*	Balentine Hall
Ladd, Chester Morris, Fy.	*Waterville*	25 Grove Street
Laffin, Catherine Scribner, He.	*Ellsworth*	Colvin Hall
Lancaster, Helengrace, He.	*Old Town*	154 Stillwater Avenue, Old Town
Lane, Arnold Clifford, Fm.	*Brewer*	K Σ House
Lawrence, Estelle Merrill, He.	*Gray*	Balentine Hall
Lawry, Edward Heath, Wc.	*Fairfield*	B Θ Π House
Leafe, Russell Paul, Me.	*Hamilton, Ont., Canada*	Σ X House

Leavitt, Ruth Madeline, Py.	*Old Town*	83 North Fourth Street, Old Town
Libbey, Elizabeth, He.	*Milford, Mass.*	Balentine Hall
Lindell, Wiljo Maurice, Ch.Eng.	*Warren*	University Cabin
Lindsay, Andrew Gowen, Es.	*North Monmouth*	Park Street
Linscott, Stanley Paul, Wc.	*Cornish*	Φ M Δ House
Littlefield, John Thomas, Me.	*Brewer*	Β Θ Π House
Littlefield, Joseph Rackliff, Ce.	*Portland*	University Cabin
Locke, Boynton, Jr., Ms.	*Boothbay Harbor*	26 Peters Street
Lord, Edwin Moor, Zo.	*Skowhegan*	24 Oak Street
Loring, Malcolm Stevens, Fm.	*Portland*	Men's Infirmary
McCain, James Stanley, Ba.	*Houlton*	Σ N House
McClelland, Ruth Winifred, He.	*Wilmette, Ill.*	Balentine Hall
MacDonald, Robert William, Me.	*York Village*	Σ X House
McDowell, Conrad Wayman, Eh.	*Portland*	Δ T Δ House
McEachern, Carl Alexander, Ce.	*Greenville Junction*	32 Pierce Street
MacGillivray, John Oliver, Fy.	*Newton Lower Falls, Mass.*	52 North Main Street
MacGregor, Walter Newell, Ee.	*Eastport*	Φ M Δ House
McLaughlin, Eugene Lawrence, Fm.	*Limestone*	Δ T Δ House
McNeill, Warren Rupert, Fy.	*Bath*	Φ Η Κ House
McPhee, Lawrence Louis, Me.	*Old Town*	42 Union Street, Old Town
McPheters, Leonard Lamont, Me.	*Bangor*	15 Savage Street, Bangor
McPheters, Linwood Snider, Me.	*Bangor*	15 Savage Street, Bangor
Maasen, John Henry, Jr., Wc.	*Scarsdale, N. Y.*	Φ Κ Σ House
Mackay, Hugh Paterson, Fy.	*Winter Harbor*	Φ Η Κ House
Maddocks, Asenath Lucille, Ed.	*Brewer*	7 Harlow Street, Brewer
Maines, John Thornton, Fy.	*Hartford, Conn.*	Β Θ Π House
Maling, Helen Louisa, Py.	*Kennebunkport*	Balentine Hall
Marks, Phyllis Ruth, Eh.	*Brookline, Mass.*	Colvin Hall
Marsh, John Ambrose, Fy.	*Bridgeport, Conn.*	Φ Η Κ House
Marshall, Donald McCutcheon, Me.	*Bath*	Σ N House
Martin, Frank Samuel, Me.	*Bath*	Φ M Δ House
Martin, Oscar Romuald, Ae.	*Frenchville*	25 Grove Street
Maxwell, Margaret, Rl.	*Bangor*	Colvin Hall
Merrill, Fred Patterson, Ce.	*Bangor*	254 Elm Street, Bangor

Merrill, Robert Stanton, Wc.	*Gray*	Σ X House
Mitchell, Nahum Wentworth, Jr., Ch.Eng.	*West Newfield*	Φ Γ Δ House
Moore, Donald Horatio, Wc.	*Beverly, Mass.*	Δ T Δ House
Moore, Eugene Lincoln, Fy.	*Houlton*	Φ H K House
Morin, Paul Eugene, Es. & Gt.	*Cranston, R. I.*	Σ X House
Morneault, Adrian Lucian, Ag.	*Lille*	25 Grove Street
Morton, Richard Gwynne, Me.	*Farmington*	Σ A E House
Mulholland, Elizabeth Catherine, Eh.	*Lubec*	Balentine Hall
Murphy, Muriel Margaret, He.	*Fort Fairfield*	Balentine Hall
Murphy, Robert Elwood, Zo.	*Oakfield*	Φ H K House
Nason, Susie Harmon, Ed.	*Brunswick*	60 Grove Street
Nelson, Harley Cummings, Ch.Eng.	*Reading, Mass.*	Δ T Δ House
Nelson, Harry Servatus, Jr., Me.	*North Vassalboro*	Φ M Δ House
Nickerson, Thomas Henry, Ee.	*Harrington*	B Θ Π House
O'Brien, Oric Osman, Fy.	*Brooks*	7 Kell Street
Oleson, Charlotte Elizabeth, Pl.	*Orono*	158 Main Street
Page, Mary Esther, He.	*Lincoln*	South Hall
Palmer, Raymond Jordan, Eh.	*West Roxbury, Mass.*	K Σ House
Pangburn, Alvah Edward, Ag.	*Caribou*	Φ H K House
Patterson, Crosby Gardner, Eh.	*Bangor*	72 Center Street, Bangor
Patterson, Paul Kieth, Fy.	*Willimantic*	395 College Road
Paul, James Stuart, Ce.	*Fort Fairfield*	18 Oak Street
Paulin, Lucille Bernice, He.	*Bangor*	442 Essex Street, Bangor
Peabody, Herbert Stanley, Fm.	*Houlton*	K Σ House
Pease, Virginia Frances, Hy.	*Wiscasset*	Balentine Hall
Peaslee, Margaret Hall, He.	*Concord, N. H.*	Balentine Hall
Peirce, Charles Albert, Hy.	*Bangor*	205 Elm Street, Bangor
Perry, Anne Elizabeth, Ms.	*Bangor*	333 Hammond Street, Bangor
Phair, Dorothy Elizabeth, He.	*Limestone*	Balentine Hall
Phelps, Mary Pond, Py.	*Foxboro, Mass.*	Balentine Hall
Pierce, Earle Sidney, Fm.	*Old Town*	34 Sixth Street, Old Town
Pierson, Alvalene May, Zo.	*Tenants Harbor*	South Hall
Piorkowski, Henry Paul, Ch.Eng.	*Union City, Conn.*	Σ X House
Piper, Richard Simmons, Ch.Eng.	*Brewer*	230 Center Street, Brewer
Pipes, Ralph Lawrence, Zo.	*Houlton*	Σ N House

Plummer, John Flagg, Ce.	*Bangor*	32 Coombs Street, Bangor
Potter, Walter Edwin, Ph.	*Sabattus*	Α Γ Ρ House
Powell, Stephen Edwin, Wc.	*Orono*	69 Forest Avenue
Pratt, Clarence LeRoy, Es. & Gt.	*Bangor*	R.F.D. #2, Bangor
Pratt, John Harold, Fy.	*Oxford*	Δ Τ Δ House
Pray, Lucie Adelaide, Zo.	*Melrose, Mass.*	Balentine Hall
Rader, William August, Ce.	*Westfield, N. J.*	Φ Η Κ House
Rand, John Albert, Ph.	*North Anson*	Α Γ Ρ House
Ray, Conrad Alan, Ch.Eng.	*Canton*	Δ Τ Δ House
Raymond, Roy Claude, Me.	*Limestone*	Φ Κ Σ House
Reed, Carolyn Pennell, He.	*Portland*	Balentine Hall
Reed, Cecil Edward, Me.	*Southwest Harbor*	Δ Τ Δ House
Reed, John Preston, Ht.	*South Brewer*	R.F.D. 8, South Brewer
Reynolds, Ralph Milton, Ce.	*Orono*	5 Forest Avenue
Rich, Edwin Stanton, Ee.	*Charleston*	25 Grove Street
Rich, Nathan Harold, Me.	*Charleston*	Stillwater
Richard, Octave Francis, Ce.	*Bangor*	170 Garland Street, Bangor
Richardson, Arthur William, Me.	*Poland*	Φ Γ Δ House
Rideout, Linwood Browne, Fy.	*Bowdoinham*	Φ Κ Σ House
Robbins, Carleton Morse, Ed.	*Belfast*	Park Street
Roberts, Malcolm Woodbury, Fm.	*Alfred*	H. H. Hall
Robertson, Eleanor Maxine, He.	*Portland*	South Hall
Robertson, Robert Brewer, Zo.	*Presque Isle*	25 Grove Street
Robie, Frederick Wilbur, Me.	*Auburn*	Φ Μ Δ House
Roche, Paul Joseph, Zo.	*Eastport*	80 North Main Street
Rogers, Anthony Joseph, Ed.	*Bangor*	63 Boyd Street, Bangor
Ross, Edward Ernest, Fy.	*Orono*	356 College Road
Roth, Alice Patricia, Ed.	*Stratford, Conn.*	Colvin Hall
Ruben, Howard, Es.	*Belfast*	12½ Pleasant Street
Rubinoff, Dorothy Helene, He.	*Portland*	The Elms
Ruddock, Edward Francis, Me.	*Kittery*	Park Street
Russell, Eugene Osborne, Ch.Eng.	*Yarmouth*	35 Grove Street
Russell, Marianne Louise, Zo.	*Phillips*	The Elms
Sadler, Rudolph Charles Albert, Ee.	*Limerick*	Σ Χ House
Saltzman, Ada Edythe, Jn.	*Bangor*	303 Broadway, Bangor
Samuelson, Robert Wentworth, Zo.	*Waban, Mass.*	Β Θ Π House
Savage, Elnora Louise, Eh.	*Bangor*	127 Maple Street, Bangor
Sawyer, Margaret Claire, He.	*Gray*	Balentine Hall

Sawyer, Neil Gould, Py.	*Easton*	Β Θ Π House
Sawyer, Richard Miles, Me.	*Portland*	Φ Μ Δ House
Schmidt, George Gerald, Bc.	*Forest Hills, L. I., N. Y.*	Σ Χ House
Schoppe, Fred Holway, Jr., Dh.	*Machias*	14 Kell Street
Schultz, Walter Melvin, Ba.	*Portland*	35 Grove Street
Scribner, Mary, Py.	*Topsham*	Balentine Hall
Shapiro, Jacob, Wc.	*Salem, N. J.*	Τ Ε Φ House
Sheedy, John Richmond, Es.	*Groton, Mass.*	Φ Γ Δ House
Shipman, Wayne Fonda, Jr., Ht.	*Worcester, Mass.*	Λ Χ Α House
Shiro, Dorothy Elizabeth, Jn.	*Bar Harbor*	Balentine Hall
Shiro, James Cople, Es. & Hy.	*Old Town*	30 South Fourth Street, Old Town
Simpson, Anna Margaretha, He.	*South Gray*	Balentine Hall
Smart, Atwood Ora, Ba.	*Houlton*	18 Oak Street
Smith, Basil Lougee, Eh.	*Winterport*	Κ Σ House
Smith, Blake Harmon, Ag.	*East Corinth*	Σ Α Ε House
Smith, Donald Calvin, Ag.	*Easton*	Φ Η Κ House
Smith, Irving Kitchen, Ag.	*Presque Isle*	25 Grove Street
Smith, Ralph Getchell, Ag.	*Exeter*	25 Grove Street
Smith, Richard Marvard, Ht.	*Orono*	382 College Road
Smith, Winfield Clinton, Ee.	*Richmond, Va.*	Σ Ν House
Soderquist, Philip Gustof, Ed.	*Monson*	14 Kell Street
Sparks, Donald Tennyson, Hy. & Es.	*Phillips*	221 Elm Street, Bangor
Spencer, Carl Edward, Ch.	*Anson*	43 Peters Street
Spofford, Gerald Ellsworth, Wc.	*Kennebunk*	University Greenhouse
Spruce, Irene Burr, Zo.	*Orono*	130 College Road
Stanley, Edward Waldron, Me.	*Farmington*	Φ Μ Δ House
Steeves, Jerome Irving, Wc.	*Lincoln*	Φ Μ Δ House
Steinmetz, Margaret Olive, He.	*Orono*	36 College Road
Stewart, Robert Frank, Ch.Eng.	*Winthrop*	Λ Χ Α House
Stone, Theodore Mordecai, Zo.	*Dorchester, Mass.*	Τ Ε Φ House
Striar, Louis, Ee.	*Bangor*	14 Adams Street, Bangor
Stuart, Parker Osborne, Ce.	*Bridgton*	Α Τ Ω House
Susi, Guy, Ce.	*Burnham*	111 Park Street
Swanton, George Coakley, Ed.	*Dexter*	7 Kell Street
Swartz, Maynard Erwin, Zo.	*Roxbury, Mass.*	Τ Ε Φ House
Sweet, Sherley Marcus, Hy. & Gt.	*Bar Harbor*	Α Χ Α House
Sylvester, Norma Leone, Rl.	*Deer Isle*	Balentine Hall

Thibodeau, Gauthier Abel, Wc.	*Auburn*	16 Hamlin Street
Thibodeau, Louis Henry, Fr.	*Rumford*	43 Main Street
Thomas, Frances Priscilla, Eh.	*Houlton*	Colvin Hall
Thomas, Kenneth Llewellyn, Es. & Sy.	*Portland*	8 Juniper Street
Thompson, Harold Everett, Ee.	*Leominster, Mass.*	Φ M Δ House
Thompson, Merrill Gene, Me.	*Southport*	K Σ House
Thorn, Raymond Edgar, Ee.	*Reading, Mass.*	Σ N House
Tolman, Marthon Gregory, Es.	*Portland*	Σ X House
Tondreau, Gertrude Ruth, Fr. & Hy.	*Brunswick*	Balentine Hall
Trask, Allen Dudley, Ch.Eng.	*Melrose Highlands, Mass.*	Σ X House
Trask, Doreen Mildred, He.	*Farmington*	Balentine Hall
Trask, Roger Boardman, Fy.	*Bangor*	234 Pine Street, Bangor
Treat, William Wardwell, Gt. & Es.	*Winterport*	312 H. H. Hall
Tremaine, Richard Leighton, Ee.	*Bangor*	Λ X Λ House
Trickey, Ruth Elizabeth, Eh. & Dr.	*Pittsfield*	Colvin Hall
Tufts, Marion Rhoda, He.	*South Berwick*	South Hall
Turner, Frederick Wayne, Dh.	*Stetson*	14 Kell Street
Tuttle, Virginia Margaret, Ms.	*East Corinth*	South Hall
Upham, Mary Adelaide, Fr.	*Biddeford*	South Hall
Upton, Frank Eric, Fm.	*Monticello*	45 Mill Street
Warren, Julia Winifred, Py. & Sy.	*Lubec*	The Elms
Watson, Geraldine Eames, Py.	*Bangor*	45 Vernon Street, Bangor
Weaver, Charles Lancaster, Ce.	*Presque Isle*	Φ H K House
Welch, Barbara Louise, Ed.	*Bangor*	216 Forest Avenue, Bangor
West, William Francis, Jr., Zo.	*Bangor*	Φ Γ Δ House
Westin, Linnea Beatrice, Hy.	*Bangor*	114 Allen Street, Bangor
Wheeler, Harold Randolph, Pa.	*Fulton, N. Y.*	Φ K Σ House
Whicher, Ralph Francis, Bc.	*Springvale*	University Cabin
White, Marion Louise, Zo.	*Bangor*	359 Hammond Street, Bangor
Whitman, Edith Irene, He.	*Stonington*	Colvin Hall
Whitney, Clifton Eugene, Fm.	*Winn*	14 Kell Street
Whitney, Louis Alden, Me.	*Brewer*	179 Wilson Street, Brewer
Whitney, Norman Eveleth, Dt.	*West Newton, Mass.*	31 Hill Street
Williams, Rees Coffin, Me.	*Westwood, Mass.*	K Σ House
Willins, Linwood Gerald, Ch.Eng.	*Bucksport*	University Cabin
Wilson, Charles, Ch.Eng.	*Eastport*	Φ M Δ House

Wilson, Gleason Woodrow, Fm.	*Jonesboro*	40 Penobscot Street
Wood, Amy Sheppard, Eh.	*Old Town*	19 North Brunswick Street, Old Town
Woods, Evelyn Ruth, Ed.	*Gorham*	23 Bennoch Street
Woodward, Joyce Clara, Hy. & Gt.	*Auburn*	South Hall
Worcester, Ruth Mabel, He.	*Newtonville, Mass.*	Balentine Hall
Worthen, Jennie Ingraham, Ed.	*Bangor*	356 Buck Street, Bangor
Wright, Samuel Judd, An.	*Clinton*	Farm Boarding House
Young, Constance, He.	*Norway*	South Hall
Young, Hugh Edwin, Ed.	*Aurora*	222 Elm Street, Bangor

SOPHOMORES

Adams, Albert Hayden, Ch.Eng.	*Canton Point*	100 North Main Street
Adams, Charles Edward, Jr., Me.	*Madison*	University Cabin
Adams, Clarence Kempton, Fm.	*Easton*	Α Τ Ω House
Alford, Wilson Merriman, Ce.	*Windsor, Conn.*	Κ Σ House
Allen, Dorothy Irene, Arts	*Bucksport*	276 State Street, Bangor
Allen, Henry Whitney, Ce.	*Freeport*	Φ Κ Σ House
Alpert, Sidney Morris, Arts	*Bangor*	455 Main Street, Bangor
Anderson, Clayton Oliver, Ch.Eng.	*Cape Elizabeth*	Φ Γ Δ House
Anderson, Edward Revere, Arts	*Canton, Mass.*	Σ Ν House
Anderson, Harold Frederick, Ch.Eng.	*Arlington, Mass.*	Σ Χ House
Anderson, Roy Laurel, Ag.	*Newport*	25 Grove Street
Arbor, Charles Joseph, Arts	*Rumford*	Κ Σ House
Ashworth, Barbara Rose, Arts	*Orono*	88 North Main Street
Astor, David, Arts	*Portland*	Τ Ε Φ House
Austin, George Mellen, Jr., Arts	*Milford*	Milford
Babel, William Keith, Bt.	*North Tonawanda, N. Y.*	35 Grove Street
Bacigalupo, Stephen Andrew, Arts	*Boston, Mass.*	Λ Χ Α House
Baker, Charles Leo, Me.	*Bucksport*	14 Island Avenue
Banton, Hartley Lanpher, Me.	*Newport*	Α Τ Ω House
Barrett, Barbara, He.	*Orono*	11 Pierce Street
Barter, Sarah Louise, He.	*Clinton*	87 Main Street
Bartley, Henry Havelock, Ag.	*Presque Isle*	Forest Avenue
Bates, Mary Lena, He.	*Bath*	Balentine Hall

Beasom, George Reynold, Ht.	*Orono*	100 North Main Street
Bell, George Louis, Arts	*Bangor*	25 Hudson Street, Bangor
Bell, Kenneth Dean, Me.	*Woodland*	7 Forest Avenue
Bennett, Robert Howard, Ce.	*Cranston, R. I.*	Σ X House
Benson, Ruth Ellen, He.	*Kennebunkport*	23 Bennoch Street
Berry, Rockwood Norton, Ht.	*Livermore Falls*	Men's Infirmary
Billings, Nathaniel Andrew, Jr., Ee.	*West Newton, Mass.*	Φ Γ Δ House
Billings, Paul Clayton, Ch.Eng.	*Stonington*	15 Park Street
Black, Gardner Angus, Ch.Eng.	*Orono*	80 Forest Avenue
Black, Irving Halsey, Wc.	*Long Branch, N. J.*	Λ Γ P House
Blackstone, Fred Jones, Jr., Ge.	*Caribou*	Δ T Δ House
Blaisdell, Donald, Ee.	*Reading, Mass.*	Φ K Σ House
Blaisdell, Kenneth Wilbur, Arts	*Ellsworth*	Φ K Σ House
Blanchard, Winifred, Arts	*Dryden*	Balentine Hall
Blethen, John, Jr., Ch.Eng.	*Rockland*	Kelly Road, Bangor
Bonacorso, Edward Samuel, Arts	*Everett, Mass.*	395 College Road
Bond, Avery Lindley, Me.	*Jefferson*	148 Main Street
Boone, Mary Elizabeth, He.	*Presque Isle*	Colvin Hall
Booth, William Roberts, An.	*Cumberland Center*	Kell Street
Boudreau, Henry Clement, Ch.Eng.	*Waterville*	Kell Street
Boyle, Harry Louis, Jr., Ee.	*Bangor*	59 Essex Street, Bangor
Boyle, Jean Elisabeth, Arts	*Madison*	South Hall
Boyle, Kathleen Mary, Arts	*Madison*	South Hall
Boynton, Arthur Marshall, Ee.	*Palermo*	College Road
Brackett, Donald Twitchell, Fy.	*Portland*	Φ Γ Δ House
Bracy, Horace Gordon, Arts	*Ogunquit*	Λ X Λ House
Bramhall, Richard Arthur, Me.	*Quincy, Mass.*	B Θ Π House
Bridges, June Hanson, Arts	*Boundary Cottage*	South Hall
Brody, Sidney Saul, Me.	*East Dedham, Mass.*	T E Φ House
Brown, Brooks, Jr., Arts	*Augusta*	Λ X Λ House
Brown, Carl Raymond, Ee.	*Levant*	185 Pearl Street, Bangor
Brown, Dwight Adams, Arts	*Ellsworth Falls*	Σ A E House
Brown, Leroy Clark, Dt.	*Farmington*	College Road
Brown, Merle Sedgewick, Jr., Arts	*South Portland*	Φ Γ Δ House
Brown, Miriam Agnes, He.	*Norway*	South Hall
Brown, Priscilla Evelyn, He.	*Milford*	Milford
Brown, Walter Eastman, Jr. Ce.	*Bucksport*	Stillwater
Brownell, Arnold Buffum, Fy.	*Cape Elizabeth*	Φ Γ Δ House
Brundage, Alfred Griswold, Fm.	*Danbury, Conn.*	Φ Π K House
Bubar, Treston Owen, Ag.	*Monticello*	25 Grove Street
Buck, Raymond Wilbur, Jr., Ag.	*Monticello*	A Γ P House

Burden, Frederick Ernest, Arts	*Presque Isle*	38 Pine Street
Burke, Mary Frances, Arts	*Bangor*	Water Works, State Street, Bangor
Burton, Blendin LeRoy, Eng.Ps.	*Bangor*	77 Webster Avenue, Bangor
Bushnell, Cornelius Huntington, Jr., Ch.Eng.	*Whitefield*	Θ X House
Butterworth, Dale Jared, An.	*Franklin, Mass.*	12 Park Street
Buzzell, Calista Louise, Arts	*Milford*	Colvin Hall
Byer, David Louis, Ee.	*Bangor*	36 Essex Street, Bangor
Byrne, John Francis, Me.	*Marlboro, Mass.*	K Σ House
Cahill, Anna Robena, Arts	*Bangor*	529 Main Street, Bangor
Candage, Byron Whitefield, Ce.	*Seal Harbor*	7 Kell Street
Carlisle, Robert, Arts	*Bangor*	Φ Γ Δ House
Carr, George Raymond, Ee.	*Plattsburg, N. Y.*	25 Myrtle Street
Carter, Elton Stewart, Arts	*Mapleton*	Φ H K House
Carter, John Merrill, Fm.	*Etna*	Φ M Δ House
Carver, Clara Ernestine, He.	*Vinalhaven*	Colvin Hall
Chapman, Mary Joan, He.	*Orono*	13 Park Street
Chapman, Mildred Lombard, He.	*Orono*	13 Park Street
Chase, Barbara, Arts	*Cape Elizabeth*	Balentine Hall
Chase, Faulkner Earlmont, Arts	*Bryant Pond*	B Θ Π House
Chase, Gordon Elms, Arts	*Bryant Pond*	B Θ Π House
Chase, Richard Holden, Ce.	*Sharon, Mass.*	B Θ Π House
Chase, Richard Raymond, Pa.	*Portland*	60 Forest Avenue
Chipman, Lester Duran, Ee.	*Mechanic Falls*	27 Wiley Street, Bangor
Christie, Alice Elizabeth, Arts	*Somerville, Mass.*	Colvin Hall
Clark, Arnold Hinckley, Eng.Ps.	*Liberty*	14 Park Street
Clark, Eva Adeline, He.	*Orono*	32 College Road
Clark, Sumner Starett, Arts	*Cape Elizabeth*	University Cabin
Clement, John Caldwell, Arts	*Belfast*	Φ Γ Δ House
Cliff, Elizabeth Patricia, He.	*Presque Isle*	Balentine Hall
Coffin, Robert William, Me.	*Harrington*	111 Park Street
Cohen, Milford Francis, Ch.Eng.	*Portland*	T E Φ House
Colbath, Burton Monroe, Ag.	*Westfield*	25 Grove Street
Colby, John Seagrave, Arts	*South Paris*	Σ X House
Colley, Chester Arthur, Arts	*Newton Centre, Mass.*	12 Park Street
Comstock, Corrine Louella, Arts	*Millinocket*	Balentine Hall

Conlan, Mabelle Blanche, Arts	*Biddeford*	The Elms
Connors, Ernest Wilbur, Ee.	*Lincolnville*	25 Grove Street
Cook, Richard Louis, Me.	*Brooklyn, N. Y.*	6 Mill Street
Cooper, Laurence Arthur, Jr., Ch.Eng.	*Auburn*	Λ X A House
Cote, Hermenegilde Paul, Arts	*Lewiston*	Θ X House
Cotton, George Benjamin, Ch.Eng.	*Auburn*	Φ Γ Δ House
Cowan, Frederick Walter, Fy.	*Portland*	Λ X A House
Cowin, Stanley Joseph, Jr., Me.	*Orono*	8 Elm Street
Craft, Laura Ursula, He.	*Bath*	Balentine Hall
Craig, John Stryker, Me.	*Bingham*	7 Forest Avenue
Crandall, Quenton Kenwood, Arts	*Presque Isle*	Φ H K House
Crane, Judson Burleigh, Me.	*Whiting*	Σ X House
Creamer, Mavis Lorraine, Arts	*Calais*	Colvin Hall
Cromwell, Margaret Emma, Arts	*Bangor*	98 Patten Street, Bangor
Crosby, Isabella, Arts	*Dexter*	Balentine Hall
Crouse, Frederick Marshall, Dh.	*Crouseville*	Φ H K House
Culberson, Sara Louise, He.	*Easton*	Balentine Hall
Cummings, Alfred Parker, Pa.	*Springdale, Conn.*	40 College Road
Cummings, Philip Edson, Arts	*Portland*	Φ Γ Δ House
Cummings, Robert Ambrose, Ch.Eng.	*Bryant Pond*	Σ N House
DaSilva, Boaventura Lopes, Arts	*Fairhaven, Mass.*	41 Mill Street
Day, Linwood McGuire, Arts	*Westbrook*	25 Grove Street
Dearborn, John Bartholomew, Me.	*Ansonia, Conn.*	Φ Γ Δ House
Dearborn, Russ Parker, Me.	*Melrose, Mass.*	B Θ H House
Delano, Raymond Frederick, Ph.	*East Corinth*	25 Grove Street
Demant, William Hans, Fy.	*East Orange, N. J.*	Φ Γ Δ House
Devoe, Donald Brown, Arts	*Bangor*	221 Elm Street, Bangor
DeWitt, Frank William, An.	*Sherman Mills*	25 Grove Street
Dexter, Franklin Dunbar, Eng.Ps.	*Martinsville, N. J.*	Φ Γ Δ House
Dinsmore, Joseph Smart, Jr., Arts	*Bangor*	151 Court Street, Bangor
DiPersio, Robert, Arts	*Meriden, Conn.*	85 Main Street
Dondis, Meredith Philip, Arts	*Rockland*	T E Φ House
Dougherty, Eleanor Mary, He.	*Camden*	The Elms
Dougherty, George Nowland, Arts	*Houlton*	312 Center Street, Old Town
Douglass, Earl Graeme, Ee.	*Hull, Mass.*	Σ N House
Downs, Fordyce Raymond, Jr., Ch.Eng.	*Belmont, Mass.*	Σ A E House
Drummond, Esther Hinckley, Arts	*Arrowsic*	Colvin Hall
Duffey, Richard Vincent, Fy.	*East Orange, N. J.*	Λ X A House
Dumas, Paul Raymond, Fy.	*Houghton*	Δ T Δ House

Dunning, Herbert Harris, Bt.	*West Roxbury, Mass.*	Σ A E House
Duplissa, George Allan, Jr., Arts	*Old Town*	90 Veazie Street, Old Town
Dyer, John Reed, Me.	*Augusta*	38 Grove Street
Dyer, Wesley James, Ph.	*Norway*	56 North Main Street
Earnshaw, John, Jr., Ee.	*Fall River, Mass.*	Σ N House
Eddy, Virginia Ellen, Arts	*Scarsdale, N. Y.*	Balentine Hall
Edgecomb, Raymond Henry, Ch.Eng.	*Sebago Lake*	60 Forest Avenue
Edmunds, John Joseph, Jr., Ee.	*Mars Hill*	Φ H K House
Ehrlenbach, Howard Lincoln, Fy.	*Tonawanda, N. Y.*	35 Grove Street
Ellis, George Hathaway, Arts	*Orono*	29 Park Street
Emery, Clarence Eugene, Ag.	*Portland*	A Γ P House
Emery, Elizabeth Mason, He.	*Bucksport*	Balentine Hall
Evans, Joanna Holmes, He.	*Wiscasset*	Balentine Hall
Fairchild, Thomas Leonard, Fm.	*Jay*	Φ K Σ House
Farmer, Blaine Linwood, Me.	*Greene*	111 Park Street
Farnham, Florence Julia, He.	*Lynn, Mass.*	The Elms
Fenderson, Willard Edward, Arts	*Calais*	Δ T Δ House
Fergatto, Antonio Frank, Arts	*Portland*	Σ A E House
Fickett, Paul Raymond, Jr., Me.	*Harrington*	College Road
Fifield, Alma Marguerite, Arts	*Brewer*	71 Parker Street, Brewer
Fillmore, Karl Alwyn, Arts	*Chamberlain*	25 Grove Street
Fisher, George Norton, Me.	*Wakefield, Mass.*	80 North Main Street
Fogg, Philip Sprague, Jr., Arts	*Melrose, Mass.*	Φ K Σ House
Friday, John Alexander, Fy.	*Schenectady, N. Y.*	51 North Main Street
Frost, Albert Hyldon, Arts	*Dexter*	Φ M Δ House
Frost, Howard Robinson, Arts	*Westfield, Mass.*	Φ Γ Δ House
Fuller, Leroy Frank, By.	*Scarsdale, N. Y.*	Σ A E House
Gallagher, Keith Navarre, Ag.	*Limestone*	100 North Main Street
Gammons, Elizabeth, Arts	*Greenwich, R. I.*	The Elms
Gardner, Charles Sherer, Fy.	*Orono*	133 Main Street
Gardner, Horace Leonard, Jr., Me.	*Freeport, N. Y.*	Φ M Δ House
Gardner, Roderic Adie, Arts	*Cape Elizabeth*	B Θ Π House
Garland, Winton Steward, Fy.	*Bangor*	63 Wiley Street, Bangor
Garrison, Ruth Jeannette, Arts	*Madison*	Balentine Hall
Garvin, Isabelle Baldwin, He.	*Alfred*	The Elms
Genge, Clarence Kitchner, Me.	*Arlington, Mass.*	Σ X House

Gilbert, Eugene Clarence, Jr., Ee.	*Winterport*	Σ A E House
Gilman, Arnold Robert, An.	*Forest Hills, N. Y.*	88 Park Street
Gilman, George Dudley, Fy.	*North Abington, Mass.*	12 Park Street
Gleason, Beatrice Helen, Arts	*South Portland*	Colvin Hall
Goodchild, Donald Wood, Ch.Eng.	*Saco*	Φ K Σ House
Goodrich, Sidney Joseph, Me.	*Gorham*	77 Mill Street
Goodwin, Donald Hugh, Ch.Eng.	*Gardiner*	Park Street
Goodwin, Donald Watson, Arts	*Alfred*	6 Mill Street
Goodwin, Robert Burrill, Ee.	*Brewer*	119 Parker Street, Brewer
Goos, Phillip, Ch.Eng.	*Bangor*	87 Birch Street, Bangor
Gopan, Max, Arts	*Bangor*	107 Birch Street, Bangor
Gosline, Walter Wadsworth, Arts	*Gardiner*	Δ T Δ House
Grant, Elizabeth Payson, He.	*Portland*	Balentine Hall
Grant, George Crandlemire, Arts	*Waterville*	K Σ House
Graves, Robert Harrison, Me.	*Plattsburg, N. Y.*	Φ M Δ House
Gray, Margaret Alma, Arts	*Sandy Point*	20 Forest Avenue
Green, Ruth Ella, Arts	*Spencer, Mass.*	The Elms
Greenlaw, David Sutton, Ch.Eng.	*Norway*	Σ X House
Greenwood, David Carroll, Me.	*Gardner, Mass.*	Σ N House
Griffin, Lloyd Wilfred, Arts	*Bradford, Mass.*	56 North Main Street
Griffith, Sidney Owen, Arts	*Kezar Falls*	Σ A E House
Gushee, Richard Alan, Arts	*Union*	25 Grove Street
Hall, Charles Alfred, By.	*Castine*	Σ A E House
Hall, Clayton, Arts	*Harrington*	395 College Road
Hall, Clinton Newell, Ch.	*Harrington*	395 College Road
Hall, James Malone, Me.	*Rockland*	Σ A E House
Hamilton, James Oliver, 2nd, Me.	*Waterboro*	Φ M Δ House
Hamilton, William Douglas Greene, Fy.	*White Plains, N. Y.*	Φ H K House
Hamm, Harold Isaiah, Arts	*Bangor*	65 Kenduskeag Avenue, Bangor
Hansen, Alma Mabel, Arts	*South Portland*	South Hall
Hanson, Fred Crowell, Me.	*Bangor*	396 French Street, Bangor
Hardy, Malcolm Edward, Fy.	*Waban, Mass.*	25 Myrtle Street
Harris, James William, Arts	*Winchester, Mass.*	Φ M Δ House
Harris, Spencer, Fy.	*Ocean Grove, N. J.*	Φ M Δ House
Hartwell, James Haywood, Ce.	*Trenton, N. J.*	86 Mill Street
Hatchard, Donald Gordon, Ee.	*Tenafly, N. J.*	12 Park Street

Hayes, Priscilla Helen, He.	*Portland*	South Hall
Hill, Rebecca, Arts	*Machias*	The Elms
Hill, Virginia, Arts	*Wilmington, Mass.*	Colvin Hall
Hiller, Robert Frederick, Fy.	*Foxboro, Mass.*	25 Myrtle Street
Hodgdon, Kenneth Willis, Wc.	*Anson*	University Cabin
Hodgkins, Emmons Blaine, Jr., Me.	*Bar Harbor*	Φ M Δ House
Holmes, Allan Bragdon, Ee.	*Guilford*	Σ X House
Holyoke, Donald Brooks, Ag.	*Brewer*	Eastern Avenue, Brewer
Hook, Walter Allan, Ce.	*Portland*	Σ X House
Hopkins, Elizabeth Marian, Arts	*Lexington, Mass.*	Colvin Hall
Hopkins, Emily Marjorie, Arts	*Waterville*	Balentine Hall
Hopkins, Richard Samuel, Me.	*Bucksport*	395 College Road
Howe, Charles Leonard, An.	*Kingfield*	25 Grove Street
Howe, Robert Frank, Bt.	*Framingham, Mass.*	Φ Γ Δ House
Howes, Cecil Edgar, Ph.	*Patten*	52 Blackstone Street, Bangor
Hoyt, John Folsom, Ce.	*Fort Fairfield*	Φ Π K House
Humphries, Angus Edward, Fy.	*Perry*	Φ M Δ House
Hunt, Norman Earl, Ag.	*Clinton*	88 Park Street
Hutcheon, James Lewis, Ag.	*Presque Isle*	Λ T Ω House
Hutchins, Martha Elizabeth, Arts	*Kingfield*	South Hall
Ingalls, Earle Lewis, Fy.	*Portland*	Σ A E House
Ingham, Joseph Morton, Arts	*Concord, N. H.*	B Θ Π House
Irvine, Robert Mayes, Fy.	*Framingham, Mass.*	Φ Γ Δ House
Jackson, Stephen Hamilton, Fy.	*Union, N. J.*	27 Myrtle Street
Jewell, Duncan Henry, Fm.	*Orono*	505 College Road
Jewett, Virginia Choate, He.	*Westport*	Colvin Hall
Johnson, Glenna Mae, He.	*Ashville*	South Hall
Johnson, Vernon Elbert, Fy.	*Milford*	Milford
Johnston, Robert Edson, Fm.	*Easton*	47 Mill Street
Jones, Margaret Louise, He.	*Orono*	164 College Road
Jordan, Harold John, Me.	*Augusta*	Φ K Σ House
Kelley, Lawrence Babbitt, Pa.	*Bellows Falls, Vt.*	Φ M Δ House
Kennedy, Clair Arthur, Arts	*South Brooksville*	64 Penobscot Street
Kent, Vernon Franklin, Arts	*Fort Kent*	Λ T Ω House
Ketchum, Frank Wentworth, Ag.	*Houlton*	25 Grove Street
Kilas, Joseph Lawrence, Pa.	*Rumford*	Λ X A House

Kimball, Everett Augustus, Arts	*Hampden*	182 Wilson Street, Brewer
Kinghorn, Robert Colin, Fy.	*Fitchburg, Mass.*	Φ M Δ House
Kingsbury, Walton Cameron, Wc.	*Boonville, N. Y.*	77 Mill Street
Kleiner, Borris, Arts	*Bangor*	442 Hammond Street, Bangor
Knapp, Phyllis Lucy, He.	*Bradley*	Bradley
Knight, Mervin Taber, Arts	*Newton Centre, Mass.*	K Σ House
Knights, Maxine Sherwin, He.	*Brewer*	166 Church Street, Brewer
Kozicky, Edward Louis, Wc.	*Eatontown, N. J.*	Φ H K House
Kuhn, Louis Joseph, Ch.Eng.	*Yonkers, N. Y.*	Λ X A House
Ladd, Leon Fairclough, Ee.	*Lewiston*	Σ N House
Lancaster, Hartwell Charles, Arts	*Old Town*	154 Stillwater Avenue, Old Town
Larson, Robert Alan, Pa.	*Norwalk, Conn.*	Φ Γ Δ House
Larsson, Robert Dustin, Ed.	*Gloucester, Mass.*	38 Pine Street
Leining, Charles Frederick, Arts	*Mt. Vernon, N. Y.*	81 Mill Street
Libby, Clifford White, Fy.	*Portland*	35 Grove Street
Libby, Lewis Simpson, Arts	*Milford*	Milford
Libby, Philip Judson, Ee.	*Freedom*	Δ T Δ House
Linnell, Ruth Howe, Arts	*Pembroke*	South Hall
Lobley, Frank Merrill, Arts	*Bangor*	498 Main Street, Bangor
Locsin, Manuel Vicente, Pa.	*Victorias, Occ. Negros, P. I.*	85 Main Street
London, Mansfield Gray, Ag.	*Houlton*	102 Mill Street
Look, Eleanor Carolyn, Arts	*Rockland*	Colvin Hall
Lord, Nathaniel Nelson, Arts	*Wells*	Σ A E House
Luce, Elizabeth Stanford, Arts	*Norwell, Mass.*	Balentine Hall
Lundberg, Robert Nelson, Arts	*Gloucester, Mass.*	Φ H K House
Lusk, Hugh Ferrel, Fy.	*Quincy, Mass.*	Φ H K House
McAlary, Elizabeth Mary, He.	*Rockland*	The Elms
McAllister, Joan, By.	*Gorham*	South Hall
McCrum, Don Lemuel, Fm.	*Mars Hill*	Φ H K House
McDonald, Robert Skillings, Eng.Ps.	*Portland*	Θ X House
McDonough, Jean Ellin, Arts	*Portland*	Colvin Hall
McEdwards, James Angus, Me.	*Union*	College Road
MacGregor, Robert Malcolm, Me.	*Plattsburg, N. Y.*	Φ M Δ House
McIntire, Edith Blanche, Arts	*Dixfield*	South Hall
McKay, Gordon Bush, Me.	*Old Town*	64 Bradbury Street, Old Town
McPheters, Robert Douglas, Ch.Eng.	*Bar Harbor*	25 Grove Street

Mack, Betty C., Arts	*Bangor*	Balentine Hall
Mackay, Bruce Albert, Ch.Eng.	*Winter Harbor*	Φ H K House
Mann, Alfred Alroy, Ch.Eng.	*Raymond*	Φ K Σ House
Marriner, Norman Earle, Arts	*Camden*	Φ K Σ House
Marsh, Edward Livingston, Ce.	*Bangor*	40 College Road
Marshall, James Robert, Ee.	*New Sharon*	80 North Main Street
Merrill, Janice, Arts	*Bangor*	75 Kenduskeag Avenue, Bangor
Meserve, Philmore Windsor, Fy.	*Auburn*	Φ H K House
Millay, Harold Sidney, Ee.	*Richmond*	Φ M Δ House
Miller, Marion Flint, He.	*Thomaston*	87 Main Street
Mitchell, Shirley Martha, He.	*Fairfield*	Balentine Hall
Monohon, Paul Jordan, Ge.	*Maplewood, N. J.*	Φ K Σ House
Morris, Robert Irving, Arts	*Bangor*	45 Maple Street, Bangor
Morse, Carroll Edwin, Me.	*Bath*	Φ M Δ House
Mosher, Mary Elizabeth, He.	*Bangor*	Balentine Hall
Mosher, Paul Newell, Dh.	*Dryden*	Farm Boarding House
Murphy, Hugh Jerome, Ag.	*Fort Fairfield*	Σ N House
Murray, George Leslie, Me.	*Newport*	A T Ω House
Murray, Gordon Pennell, Arts	*Madison*	Φ H K House
Mussenden, William Frederick, Ch.Eng.	*Bath*	B Θ Π House
Mutty, Edwin Louis, Arts	*Bangor*	168 Grove Street, Bangor
Muzroll, Lawrence Joseph, Arts	*Rumford*	K Σ House
Myers, Clyde Edmund, Arts	*Orono*	33 Spencer Street
Newcomb, Frederick Melville, Ag.	*Scarboro*	K Σ House
Newhall, Carl Alvin, Ce.	*Peabody, Mass.*	K Σ House
Nichols, Malcolm George, Fy.	*Stillwater*	Stillwater
Nichols, Margaret Jane, Arts	*Stillwater*	Stillwater
Nystrom, George Leonard, Pa.	*Plainville, Conn.*	B Θ Π House
Oakes, Stewart Francis, Me.	*Rangeley*	Σ N House
Oaksford, Homer Hollett, Jr., Fy.	*Gloversville, N. Y.*	Σ A E House
Oberly, Mary Carol, Arts	*Augusta*	164 College Road
Odlin, Clifford Woodbridge, Eng.Ps.	*Portland*	University Cabin
O'Donoghue, John Kew, Me.	*Lowell, Mass.*	380 College Road
Olsson, Henry Richard, Ch.Eng.	*Lynnfield Center, Mass.*	Σ N House
Oppenheim, Edward Elliot, Arts	*Rumford*	226 Hammond Street, Bangor
Orff, Barbara Alice, He.	*Rockland*	Colvin Hall
Osgood, Burt Sterling, Jr., Arts	*Orono*	37 Park Street

Parsons, Charles Boone, Fm.	*Presque Isle* Α Τ Ω House
Parsons, William Frazier, Eng.Ps.	*Skowhegan* 24 Oak Street
Pattee, Clifford Henry, Ee.	*Easton* Forest Avenue
Paul, Roger Fernald, Fy.	*York Beach* Α Χ Α House
Payson, Carlton Burnett,-Ag.	*Union* College Road
Peaslee, Elizabeth Frances, He.	*Concord, N. H.* Colvin Hall
Peavey, Harry Clothey, Jr., Me.	*Webster Groves, Mo.* Jefferson Street, Old Town
Peirce, Jean Margaret, He.	*Bangor* 205 Elm Street, Bangor
Pennell, John Dunning, Jr., Ch.	*Portland* 34 Pine Street
Perkins, Charlene Mary, Arts	*Madison* Balentine Hall
Perkins, Howard Roscoe, Ce.	*Orono* 80 North Main Street
Perry, Clifford Given, Me.	*Bowdoinham* 25 Grove Street
Perry, Leona Mary, He.	*Jefferson* 20 Forest Avenue
Perry, Lionel Alvah, Bc.	*Sherman Mills* 25 Grove Street
Philbrook, Constance Fanny, He.	*Shelburne, N. H.* The Elms
Philbrook, Margaret Elizabeth, Arts	*Tenafly, N. J.* The Elms
Pierce, Richard Herd, Me.	*Leominster, Mass.* Σ Α Ε House
Pineo, Priscilla, Arts	*Milo* Colvin Hall
Pinkham, Ernestine King, Arts	*Portland* South Hall
Piper, Allan Eugene, Bt.	*Troy* 14 Kell Street
Plummer, Richard Frank, Ch.Eng.	*Lisbon* Α Τ Ω House
Pomeroy, Yvonne Anna, Arts	*Hampden Highlands* Hampden Highlands
Pratt, Virgil Stewart, Wc.	*Skowhegan* Stillwater
Preble, Claralyn Owen, Arts	*Enfield* 10 Oak Street, Old Town
Preble, Clayton Hinckley, Ee.	*Addison* College Road
Pullen, Winston Eugene, Fm.	*Monson* 192 Webster Avenue, Bangor
Ramsdell, Richard Theodore, Fy.	*Milton, Mass.* Α Γ Ρ House
Rand, Emily Allen, Arts	*Bangor* 14 Frances Street, Bangor
Reed, Ruth Helena, He.	*Madawaska* Colvin Hall
Reed, Walter Sherwood, Jr., Arts	*Boothbay Harbor* Δ Τ Δ House
Reid, Elizabeth Stanley, Arts	*Bangor* The Elms
Reilly, James Richard, Wc.	*Tottenville, S. I., N. Y.* Σ Ν House
Reitz, John Addison, Ce.	*Waltham, Mass.* Σ Χ House
Rheinlander, Harold Falle, Arts	*Van Buren* 3 Park Street
Rhoda, Frances Eleanor, He.	*Milo* Balentine Hall
Riddle, Oscar Walter, Me.	*Rangeley* Σ Α Ε House
Riddle, William James, Ch.Eng.	*Bridgton* Σ Α Ε House

Riley, Pauline Frances, Arts	*Biddeford*	Balentine Hall
Risman, George Carl, Arts	*Roxbury, Mass.*	14 Park Street
Roach, Harry Quinton, Fm.	*Smyrna Mills*	Σ N House
Robertson, Frank O'Neil, Jr., Arts	*Bethel*	Α Τ Ω House
Robertson, Kenneth Noble, Ge.	*Auburn*	18 Oak Street
Rollins, Maynard Francis, Fy.	*Ogunquit*	Λ Χ Α House
Romero, Margaret Robinson, Arts	*Bangor*	32 North Street, Bangor
Rosenberg, Alan Warren, Arts	*Newton Centre, Mass.*	Τ Ε Φ House
Rowe, Elizabeth Gould, He.	*Milo*	Balentine Hall
Rowe, Hilda Barton, Arts	*Bangor*	Balentine Hall
Rubin, Sylvia Anna, Arts	*Bangor*	312 French Street, Bangor
Saunders, Donald Arthur, Ch.Eng.	*Rockland*	Θ Χ House
Savage, Harriett DuBois, Arts	*Lyndhurst, N. J.*	Colvin Hall
Sawyer, Frances Lenora, He.	*Waterville*	Balentine Hall
Scanlin, Merlin Thomas, Fm.	*Weston*	Α Γ Ρ House
Serota, Jacob, Fy.	*Portland*	35 Grove Street
Shackelford, Charles Henry, Fy.	*South Hamilton, Mass.*	Σ N House
Shaw, Delmar Daniel, Jr., Me.	*Scarboro*	Φ Γ Δ House
Shearer, Frank Price, Wc.	*Pennington, N. J.*	Κ Σ House
Shepard, LeRoy Granville, Me.	*Deer Isle*	Φ Κ Σ House
Sherman, Charles Merrill, Arts	*Pembroke, Mass.*	Δ Τ Δ House
Silverman, David, Ee.	*Portland*	87 Park Street
Simpson, Eloise Pratt, Arts	*Attleboro, Mass.*	Colvin Hall
Skoufis, Peter John, Arts	*Bangor*	18 Lincoln Street, Bangor
Smart, Madeline Marie, He.	*Houlton*	Balentine Hall
Smith, Charles Byron, Jr., Ph.	*Orono*	39 Park Street
Smith, Charlotte Boynton, Arts	*Bangor*	24 University Place
Smith, James Frederick, Ee.	*Richmond, Va.*	Σ N House
Smith, Julia Alice, He.	*South Parsonsfield*	North Hall
Smith, Owen Halbert, Ag.	*Presque Isle*	Φ Η Κ House
Smith, Robert Butman, Arts	*South Portland*	Stillwater
Smith, Sherman King, Ce.	*Gardiner*	Φ Κ Σ House
Smith, Thomas Joseph, Jr., Ch.Eng.	*West Haven, Conn.*	Δ Τ Δ House
Snell, Henry Ambrose, By.	*Gorham*	Α Γ Ρ House
Sobel, Isadore Theodore, Pa.	*New York, N. Y.*	395 College Road
Somes, John William, Arts	*Mt. Desert*	Σ N House
Staples, Grant Dockendorf, Ce.	*Whitefield*	Φ Κ Σ House
Staples, Ormond Adolph, Fy.	*Camden*	Stillwater

Starbird, Clinton Virgil, Me.	*Strong*	Σ A E House
Stearns, Roger Austin, Fm.	*South Paris*	Φ M Δ House
Stevens, Clifford Alton, Fy.	*Lincoln*	Φ M Δ House
Stevens, John Rufus, Ag.	*Smyrna Mills*	26 Davis Street, Old Town
St. Germain, William Albert, Me.	*Greenville*	3 Park Street
Stilphen, Olive Mary, Arts	*Richmond*	The Elms
Stisulis, Walter Lewis, Ce.	*Mexico*	K Σ House
St. Lawrence, Mitchell Bradley, Ag.	*Orono*	27 Myrtle Street
Storer, Allan Philbrick, By.	*Freedom*	3 Park Street
Strang, Walter Pershing, Wc.	*Madison*	Σ A E House
Stritter, Karl Witmer, Ht.	*Nahant, Mass.*	B Θ Π House
Strout, Roger Philip, Me.	*Grosse Ile, Mich.*	B Θ Π House
Stubbs, Charlton Percival, Me.	*Bucksport*	23 Park Street
Sullivan, Richard Paul, Me.	*Portland*	A T Ω House
Tackaberry, Robert Bernard, Eng Ps.	*Old Town*	28 Davis Street, Old Town
Talbot, James Edward, Fy.	*Woodland*	A T Ω House
Tarbell, Allan Brown, Arts	*Smyrna Mills*	B Θ Π House
Tardoni, Daniel James, Ch.Eng.	*Sayre, Pa.*	Stillwater
Taylor, Charles Evans, Arts	*Belfast*	12½ Pleasant Street
Thompson, Esther LaDora, Arts	*Biddeford*	Balentine Hall
Towle, Myron John, Fm.	*Fort Fairfield*	312 Center Street, Old Town
Townsend, Paul Alexander, Arts	*Bluehill*	Θ X House
Tracy, Frederick Foster, Me.	*Northeast Harbor*	Σ A E House
Tracy, Samuel Edwin, Jr., Arts	*Northeast Harbor*	Σ A E House
Treadwell, Jane Elisabeth, Ch.	*Salem, Mass.*	Colvin Hall
Troop, Benjamin Sabin, Fy.	*West Hartford, Conn.*	Φ H K House
Trott, Margaret Elizabeth, Arts	*Bath*	The Elms
Trowbridge, John Perrin, Ce.	*Pomfret Center, Conn.*	A X A House
Tucker, Herbert Walter, Fy.	*Cherryfield*	100 North Main Street
Tufts, Christine Evelyn, Arts	*Kingfield*	South Hall
Tweedie, James Kerr, Arts	*Lamoine*	Σ A E House
Upcott, Dorothy Lavinia, Arts	*Orono*	20 Forest Avenue
Utterback, John Dudley, Ge.	*Bangor*	Φ Γ Δ House

Valliere, Raymond Andrew, Arts	*South Berwick*	Δ T Δ House
Verrill, Anna Elizabeth, He.	*Westbrook*	Balentine Hall
Violette, Frances Lima, Arts	*Balboa, C. Z.*	Colvin Hall
Volkman, Wallace Harry, Ee.	*West Somerville, Mass.*	16 Pine Street
Walker, Alexander, Jr., Fy.	*Rochester, N. Y.*	K Σ House
Walker, Neal Harvey, Ag.	*Wiscasset*	A Γ P House
Wall, Robert Hanley, Ee.	*Wells*	41 Mill Street
Walsh, Agnes Ann, Arts	*South Portland*	South Hall
Warren, David Wyman, Jr., Arts	*Pripet*	Φ Γ Δ House
Webster, June Anna, He.	*Bangor*	435 Union Street, Bangor
Webster, Shirley Gwynne, Me.	*Lincoln*	25 Grove Street
West, Dora Brown, Arts	*Lexington, Mass.*	The Elms
Weston, Donald Williams, Me.	*Madison*	College Road
Weymouth, Flora Gwendolyn, Arts	*Howland*	Colvin Hall
Wheeler, Francis Adams, Me.	*Auburn*	A T Ω House
White, Charlotte Zeluma, Arts	*Bowdoinham*	South Hall
White, Howard Colon, Me.	*Hulls Cove*	17 Hamlin Street
White, Ruth Elizabeth, Arts	*Bangor*	Balentine Hall
Whitehouse, Marjorie Marion, Arts	*Augusta*	South Hall
Whitman, Forrest Giles, Fy.	*East Auburn*	Σ N House
Whitney, Byron VanBleck, Arts	*Winn*	25 Grove Street
Whitten, Maurice Harvard, Ag.	*Fort Kent*	Φ H K House
Wilbur, Gorham Homer, Me.	*Dexter*	College Road
Willetts, Robert Taber, Fy.	*Roslyn, L. I., N. Y.*	K Σ House
Willey, Roslyn Bradford, Ag.	*Orono*	88 Park Street
Williams, Frank Raymond, Arts	*Mechanic Falls*	8 Main Street
Williams, James Oliver, Ch.Eng.	*Ogunquit*	Λ X A House
Wilson, Adam Winslow, Fm.	*Portland*	6 Mill Street
Wing, Dorothy Hopkins, He.	*Bath*	Colvin Hall
Winslow, Paul Lee, Ee.	*Norridgewock*	384 College Road
Woodbrey, Cecil Sherman, Eng.Ps.	*Sebago Lake*	60 Forest Avenue
Woolley, Thomas Russell, Jr., Ee.	*Bridgton*	Σ A E House
Wooster, Ruth, He.	*Old Town*	258 Center Street, Old Town
Wormwood, Helen Bradbury, Arts	*Portland*	The Elms
Wyman, Paul Hoxie, Arts	*Waterville*	Σ A E House
Young, Barbara Alice, Arts	*Calais*	Colvin Hall

Zieno, Angelo Salvatore, Fy.	*Norwich, N. Y.*	88 Park Street
Zitaner, Morris, Arts	*South Brewer*	R.F.D. #8, South Brewer

UPPERCLASS STUDENTS CONDITIONED FOR ADMISSION

Belknap, Russell Eliott, Me.	('40)	*Norfolk, Mass.*	Β Θ Π House
Doten, Nathaniel Miles, Py.	('40)	*Newton Highlands, Mass.*	University Cabin
Grinnell, Kenneth Paul, Arts	('41)	*Newton Centre, Mass.*	33 Pond Street
Howe, Virginia Mae, Arts	('41)	*Union*	Balentine Hall
Lovejoy, Robert John, Arts	('41)	*Farmington*	Σ Α Ε House

FRESHMEN

Abbott, Susan Dukeshire, He.	*Union*	North Hall
Adams, David Archibald, Ch.	*Brewer*	201 Oak Hall
Adasko, Miriam Revilla, Arts	*Gloucester, Mass.*	The Maples
Albert, Joseph James, Arts	*Bangor*	22 Patten Street, Bangor
Alexander, Helen Audrey, Arts	*Saco*	The Maples
Allen, Philbrook Dickson, Fy	*Brunswick*	307 H. H. Hall
Anderson, John Rudolph, Eng.	*Livermore Falls*	211 Oak Hall
Andrews, Frances Christine, He.	*Portland*	The Maples
Andrews, Francis Swain, Arts	*Norway*	205 Oak Hall
Ansell, Elizabeth Clark, Arts	*Dexter*	The Maples
Arbo, Edward Payson, Ch.Eng.	*Brownville*	409 Oak Hall
Armitage, Walter Howard, Me.	*Methuen, Mass.*	395 College Road
Ashman, Shirley Gladys, Arts	*Augusta*	69 Mill Street
Atwood, Florence Caro, He.	*Brunswick*	The Maples
Axtell, Arthur Gardner, Fy.	*Saugerties, N. Y.*	23 Spencer Street
Bachman, Gerald William, Ch.Eng.	*Augusta*	402 Oak Hall
Bacon, Henry Ferdinand, Me.	*Oakland*	25 Grove Street
Balaban, Dan, Arts	*South Boston, Mass.*	12 Pleasant Street
Ballou, Ervin Elwood, Agr.	*Cumberland Center*	401 Oak Hall
Banton, Madeliene Lois, Arts	*Newport*	The Maples
Bardo, Clinton Lloyd, Fy.	*Springfield, Mass.*	102 H. H. Hall

Barker, Elizabeth Jane, Arts	*Bangor*	45 Blackstone Street, Bangor
Barrows, Edward Pomeroy, Arts	*Augusta*	202 Oak Hall
Barrows, John Clifford, Ch.	*Glen Ridge, N. J.*	212 Oak Hall
Bartlett, Alice Janet, Arts	*Orono*	74 North Main Street
Bean, Bryant Chapman, Arts	*Bryant Pond*	311 H. H. Hall
Beaton, Clifford Merrill, Ch.	*Bangor*	477 Essex Street, Bangor
Beaton, Donald Edgar, Arts	*Bangor*	R.F.D. #7, Hammond Street, Bangor
Beaton, Robert John, Fy.	*Stoughton, Mass.*	203 Oak Hall
Beckmann, William Richard, Fy.	*Brooklyn, N. Y.*	409 H. H. Hall
Beegel, Paul Milton, Jr., Arts	*Bangor*	178 State Street, Bangor
Benjamin, Charles Smith, Jr., Arts	*Ridgewood, N. J.*	395 College Road
Berg, Shirley Belle, Arts	*Bangor*	56 Fern Street, Bangor
Berry, Jeannette Elizabeth, Arts	*Houlton*	The Maples
Bickford, Frances Elizabeth, He.	*Madison*	The Maples
Bigelson, Arthur, Eng.	*Bangor*	142 York Street, Bangor
Bisson, Jacqueline Yvonne, Arts	*Bath*	The Elms
Blake, Clayton Purington, Ge.	*Portland*	Park Street
Blake, Clifford Arnold, Agr.	*Cornish*	104 H. H. Hall
Blake, Cora Josephine, He.	*LaGrange*	40 College Road
Blanchard, Bertrand Everett, Agr.	*Dover-Foxcroft*	211 H. H. Hall
Blanchard, Gordon Chapman, Me.	*Swampscott, Mass.*	104 H. H. Hall
Blanchard, Kenneth Stephen, Me.	*Blanchard.*	412 H. H. Hall
Bodman, Milton Tucker, Arts	*Lubec*	101 H. H. Hall
Bonney, Alton Grover, Jr., Eng.	*Portland*	University Cabin
Bouchér, Marcel Ralph, Me.	*Auburn*	210 H. H. Hall
Bouis, Charles Elliott, Fy.	*Cincinnati, Ohio*	101 H. H. Hall
Bower, John Allen, Ge.	*Auburn*	401 Oak Hall
Bowers, Durant, Jr., Ee.	*Bangor*	53 State Street, Brewer
Bowser, Robert Vance, Ee.	*Reading, Mass.*	306 H. H. Hall
Boyd, Arthur, Agr.	*Milford*	Milford
Bradeen, Doris Mae, He.	*Millinocket*	32 College Road
Brandt, Robert Alfred, Agr.	*Brookline, Mass.*	85 Main Street
Brewer, Dorothy Frances, He.	*Bar Harbor*	The Elms
Brewster, Frank Eugene, Ch.	*South Portland*	305 H. H. Hall
Briggs, Chandler Adams, Arts	*South Paris*	410 H. H. Hall
Brown, Donald Vaughn, Ch.	*Fairfield*	101 H. H. Hall
Brown, Emmons Pray, Ch.Eng.	*Mt. Desert*	88 Park Street
Brown, Harvey Weston, Arts	*Mt. Desert*	88 Park Street

Brown, Wallace Graham, Me.	*Old Town*	271 Center Street, Old Town
Browne, Robert Irving, Agr.	*Bethel*	3 Park Street
Buck, George Hill, Me.	*Orland*	311 H. H. Hall
Bucknam, William Ray, Ce.	*Machias*	111 Oak Hall
Burger, Francis William, Ch.Eng.	*Lynn, Mass.*	Stillwater
Burke, John Edward, Ee.	*Bangor*	Water Works, State Street, Bangor
Burleigh, Sarah Elizabeth, Arts	*Augusta*	The Maples
Burnett, John McGregor, Jr., Ee.	*Skowhegan*	384 College Road
Burnham, Francis Utby, Jr., Eng.	*Turners Falls, Mass.*	103 H. H. Hall
Burnham, Reuben Sylvester, Ch.	*West Scarboro*	103 H. H. Hall
Burpee, Frederick Todd, Fy.	*Orono*	Bennoch Street
Burr, Webster Bills, Fy.	*Rochester, N. Y.*	311 H. H. Hall
Butler, Wendell Taylor, Ch.	*Springvale*	23 Spencer Street
Butterfield, Wilfred Irving, Jr., Arts	*Bangor*	147 Maple Street, Bangor
Candelet, James Fortune, Arts	*Providence, R. I.*	20 Peters Street
Carter, Genevieve Elizabeth, He.	*Ellsworth*	North Hall
Carter, Leland Franklin, Ce.	*Freeport*	104 Oak Hall
Case, William Waldo, Fy.	*Springfield, Mass.*	110 H. H. Hall
Cass, Bevan Gillet, Fy.	*Philadelphia, Pa.*	110 H. H. Hall
Chadbourne, Ernest Donald, Agr.	*East Baldwin*	212 H. H. Hall
Chandler, John Everett, Arts	*Winthrop*	17 Margin Street
Chase, George Oscar, Arts	*Millinocket*	201 H. H. Hall
Chick, Richard Loring, Fy.	*South Berwick*	401 H. H. Hall
Christensen, William Mathias, Jr., Eng.	*Auburn*	207 Oak Hall
Church, James Elwood, Jr., Arts	*Gardiner*	312 H. H. Hall
Chute, Robert Eugene, Eng.	*Norway*	408 H. H. Hall
Clark, Alton Willis, Ch.	*Kennebunk*	406 H. H. Hall
Clark, Paul Henry, Arts	*Newport*	69 Forest Avenue
Clark, Richard Lucien, Fy.	*Clark's Mill*	395 College Road
Clark, William Bradbury, Eng.	*Lewiston*	110 H. H. Hall
Cleverly, Muriel Beatrice, Arts	*Hull, Mass.*	The Maples
Cliff, Margaret York, Arts	*Presque Isle*	The Maples
Cobb, Sterling Ellsworth, Ag.	*Lee*	25 Grove Street
Coffin, Richard Hale, Eng.	*Bangor*	25 West Street, Bangor
Cohen, Jozef Bertram, Arts	*Roxbury, Mass.*	201 H. H. Hall
Colpitts, Bernard Eugene, Me.	*Saco*	110 H. H. Hall

Conti, Rudolph Francis, Arts	*Arlington, Mass.*	101 H. H. Hall
Cope, Harry, Ch.Eng.	*Portland*	242 Hancock Street, Bangor
Cousins, Florence Evelyn, Arts	*Old Town*	94 North Fourth Street, Old Town
Cowie, Douglas Brann, Pa.	*Rockville Centre, N. Y.*	112 H. H. Hall
Cowin, Mary Alexia, Arts	*Orono*	8 Elm Street
Cox, Charles Garnett, Pa.	*Woodland*	7 Forest Avenue
Cox, Edward Glidden, Jr., Agr.	*Brooks*	7 Kell Street
Cox, William Sylvester, Eng.	*Lisbon Falls*	3 Brook Street
Cranch, Richard Christopher, Fy.	*Larchmont, N. Y.*	112 H. H. Hall
Crapo, Arthur Chester, Ee.	*North Dartmouth, Mass.*	7 Kell Street
Crocker, Guy Joseph, Ch.	*Vanceboro*	25 Grove Street
Crocker, Samuel Davis, Agr.	*Old Town*	18 Bradbury Street, Old Town
Crossland, Lloyd Byron, Ch.Eng.	*Mexico*	University Cabin
Crowley, Nathaniel Joseph, Arts	*Winthrop, Mass.*	H. H. Hall
Cummings, Vivian Eulalie, He.	*LaGrange*	24 Oak Street
Cunningham, George Barker, Arts	*Old Town*	36 Veazie Street, Old Town
Curtis, Boyd Alvin, Agr.	*Easton*	208 H. H. Hall
Curtis, Raymond Wilson, Jr., Arts	*Marblehead, Mass.*	404 H. H. Hall
Dale, Ralph Orlando, Jr., Ch.Eng.	*Bath*	104 Oak Hall
Dalrymple, Robert Anthony, Arts	*Framingham, Mass.*	209 Oak Hall
Danforth, Paul Dow, Me.	*Old Town*	152 Middle Street, Old Town
Dangler, Edgar William, Fy.	*Brooklyn, N. Y.*	50 Pine Street
Davis, Carl Forrest, Arts	*Milo*	16 Pine Street
Davis, Carrol Dwight, Ee.	*Solon*	411 Oak Hall
Davis, Donald Hasbrouck, Ch.Eng.	*Longmeadow, Mass.*	109 H. H. Hall
Davis, Robert Thomas, Arts	*Old Town*	16 Davis Court, Old Town
Day, McClure, Agr.	*Damariscotta*	206 H. H. Hall
Day, Richard Beston, Agr.	*Damariscotta*	7 Kell Street
deBarros, Richard John, Agr.	*Nantucket Island, Mass.*	17 Margin Street

Deering, Harry Lincoln, Ec.	*Bath*	59 Park Street
Deering, Robert Bowman, Agr.	*Orono*	160 College Road
deGraffenried, Anthony Foster, Fy.	*Miller Place, L. I., N. Y.*	206 H. H. Hall
Dempsey, Thomas John, Ch.Eng.	*East Machias*	113 Margin Street
Denesuk, Nicholas, Fy.	*Peabody, Mass.*	109 H. H. Hall
Dennis, Eleanor Blanche, Arts	*Old Town*	10 Elm Street, Old Town
deRoth, Gerardus Cabble, Fy.	*Lynbrook, L. I., N. Y.*	3 Park Street
DeShon, Howard Clifford, Ce.	*Machias*	111 Oak Hall
Desjardins, Geoffrey Louis, Jr., Arts	*Brunswick*	404 H. H. Hall
Dickens, Thomas Daniel, Fy.	*Camden*	395 College Road
Dimitre, Margaret Lorraine, Arts	*Calais*	The Maples
Dixon, Elinor Louise, Arts	*South Berwick*	The Maples
Dobrow, Jordan, Arts	*Chelsea, Mass.*	109 Oak Hall
Dodge, David Thaxter, Agr.	*Bangor*	395 College Road
Dole, Arthur Sidney, Jr., Arts	*Bangor*	R. #2, Bangor
Dole, Richard Dresser, Ch.Eng.	*Sebago Lake*	310 H. H. Hall
Dorr, Donald Eugene, Fy.	*Ridlonville*	109 H. H. Hall
Dow, Clarence Pearl, Fy.	*Charleston*	208 Elm Street, Bangor
Dow, Leslie Alexander, Ch.Eng.	*Stillwater*	Stillwater
Dow, Levi Sewell, Fy.	*Fort Kent*	406 Oak Hall
Downes, Laurence Maxwell, Me.	*Bangor*	65 Grant Street, Bangor
Doyle, Margaret Eleineen, Arts	*Caribou*	The Elms
Duffee, Robert Hudson, Arts	*Ellsworth*	R.F.D. #7, Bangor
Duggan, Lloyd Bernard, Arts	*Kennebunk*	410 Oak Hall
Duncan, Carl Porter, Arts	*Presque Isle*	207 H. H. Hall
Dyer, Robert Hall, Fy.	*Turner*	College Road
Dyer, Samuel, Jr., Eng.	*Framingham, Mass.*	309 Oak Hall
Eastman, Ruth Elizabeth, Arts	*Augusta*	32 College Road
Edelstein, Irving, Arts	*Sanford*	211 H. H. Hall
Edes, Thelma Mae, Arts	*Naples*	North Hall
Edgecomb, Wilbur Robert, Eng.	*Rumford*	411 H. H. Hall
Edmunds, Edward Hawksley, Arts	*Mars Hill*	303 Oak Hall
Edwards, Dallas Hunter, Arts	*Gardiner*	103 Oak Hall
Ehrenfried, Paul, Arts	*Lewiston*	380 College Road
Eldridge, John William, Ch.Eng.	*Skowhegan*	201 Oak Hall
Elliott, Gerald Edward, Agr.	*Fort Fairfield*	403 H. H. Hall

Elliott, Russell Smith, Ch.Eng.	*Bangor* 64 Sanford Street, Bangor
Elwell, Robert Arthur, Agr.	*Gorham* 3 Park Street
Emery, Edwin Black, Agr.	*Limington* 410 H. H. Hall
Emery, Lawrence Woodford, Arts	*Reading, Mass.* 112 H. H. Hall
Emmons, Barbara Wentworth, Arts	*Worcester, Mass.* The Maples
Evans, William Henry, Pa.	*Manhasset, L. I., N. Y.* 202 H. H. Hall
Fallon, Christopher, Fy.	*Augusta* 308 H. H. Hall
Farnham, Barbara May, Arts	*Bangor* R.F.D. #4, Ohio Street, Bangor
Feinberg, Robert Malcolm, Arts	*Chelsea, Mass.* 201 H. H. Hall
Field, Kenneth Adelbert, Me.	*Hampden* Hampden
Fielding, Richard Norman, Arts	*Malden, Mass.* 202 H. H. Hall
Findlen, Herbert, Agr.	*Fort Fairfield* 395 College Road
Fink, John Edward, Fy.	*Brooklyn, N. Y.* 409 H. H. Hall
Fish, Warren Hamlin, Arts	*Concord, Mass.* 404 Oak Hall
Fisher, Ada Caroline, Arts	*Smyrna Mills* 17 Oak Street, Old Town
FitzPatrick, John Dowd, Arts	*Marblehead, Mass.* 105 Oak Hall
Flanagan, Mary Ellen, He.	*Madison* The Maples
Fortier, Robert Francis, Arts	*Bangor* 43 Broadway
Foster, Orsan Junior, Me.	*Baring* 204 H. H. Hall
Francis, Wallace Robert, Eng.	*Yonkers, N. Y.* 111 H. H. Hall
Franz, Richard Oscar, Fy.	*Thornwood, N. Y.* 100 Mill Street
Freedman, Stanley Philip, Ch.Eng.	*Portland* 301 Oak Hall
French, John Scates, Arts	*Pleasantville, N. Y.* 307 Oak Hall
French, Marjorie Violet, He.	*Winthrop* 32 College Road
French, Maynard Gardner, Eng.	*Livermore Falls* 211 Oak Hall
French, Robert Joseph, Arts	*Guilford* 406 H. H. Hall
Frost, Albert Ephraim, Ee.	*East Poland* 17 Margin Street
Gabrielian, Henry, Eng.	*Worcester, Mass.* 60 Forest Avenue
Galentine, Paul Guy, Jr., Ee.	*Portland* 101 Oak Hall
Gallant, Francis Louis, Ee.	*Bangor* 34 East Summer Street, Bangor
Gannon, Henry Francis, Fy.	*New Rochelle, N. Y.* 395 College Road
Garfinkle, Harold, Arts	*Mattapan, Mass.* 201 H. H. Hall
Garsoe, William Joseph, Agr.	*Portland* 204 H. H. Hall

Gatcomb, Morrill Ashley, Arts	*East Machias* 85 Main Street
Gay, Raymond Francis, Jr., Eng.	*Stony Creek, Conn.* 403 H. H. Hall
Geary, Edward Joseph, Arts	*Lewiston* 205 H. H. Hall
Gill, Raymond Lewis, Agr.	*Frankfort* Forest Avenue
Gillin, James McKinnon, Jr., Eng.	*Bangor* 466 State Street, Bangor
Gilman, Dorothy Janet, He.	*Porter* North Hall
Gilman, Manuel Alan, Agr.	*Forest Hills, N. Y.* 88 Park Street
Gilman, William Pattangall, Ge.	*Augusta* 308 Oak Hall
Ginsburg, Saul, Eng.	*Portland* 412 Oak Hall
Gleason, Eleanor Lou, He.	*Union* North Hall
Gleason, Elene May, He.	*Brewer* 82 North Main Street, Brewer
Glen, Leonard Cornelius, Jr., Me.	*Lowell, Mass.* 90 Pine Street
Glider, Victor, Fy.	*Hartford, Conn.* 37 Forest Avenue
Glover, John White, Jr., Ee.	*Orono* 265 Main Street
Goldberg, Edward Leo, Arts	*Lynn, Mass.* 12 Pleasant Street
Goldfarb, Daniel Maurice, Arts	*Chelsea, Mass.* 12 Pleasant Street
Goldsmith, Alvin Robbins, Ee.	*Skowhegan* 303 Oak Hall
Goodwin, Jean Elizabeth, He.	*Caribou* The Maples
Gorman, John Carroll, Fy.	*Wellesley, Mass.* 205 H. H. Hall
Gould, Maxwell, Ch.Eng.	*Sandy Point* Sandy Point
Goulette, Gerard Alphonse, Arts	*Dexter* 111 Park Street
Gowen, Barbara Muirhead, Arts	*Saco* 82 Main Street
Graham, Benjamin Franklin, Fy.	*Milton, Mass.* 203 H. H. Hall
Graves, Richard Stayner, Me.	*Chebeague Island* 100 North Main Street
Gray, Herbert Kenneth, Me.	*East Bluehill* 25 Grove Street
Gray, Howard Malcolm, Eng.	*East Bluehill* 25 Grove Street
Greenleaf, Laurie Jones, Eng.	*Auburn* 405 H. H. Hall
Gress, Paul Charles, Arts	*Weehawken, N. J.* 203 H. H. Hall
Griffee, Donald Gordon, Me.	*Orono* 55 Bennoch Street
Grundy, Ruth Helen, He.	*Auburn* North Hall
Guard, Charles Atherton, Agr.	*Honolulu, T. H.* 102 Oak Hall
Habern, Michael, Ch.Eng.	*Manchester, Conn.* 395 College Road
Haffner, Rudolph Eric, Fy.	*Portland* 409 H. H. Hall
Hale, Titus Stuart, Jr., Eng.	*Portland, Conn.* 203 H. H. Hall
Hall, Elden David, Jr., Ce.	*Farmington* 103 Oak Hall
Hamilton, Violet Mary-Anne, Arts	*Pittsfield* 82 Main Street
Haney, Ralph William, Ee.	*Bangor* 176 Ohio Street, Bangor

Harrington, Edgar Bernard, Agr.	*Patten*	University Cabin
Haskell, Gwendolyn Estelle, He.	*Lincoln*	32 College Road
Haskell, Thomas Dudley, Jr., Arts	*Deer Isle*	8 Main Street
Hastings, Virginia Kittridge, He.	*Bangor*	61 Congress Street, Bangor
Hatch, Archie Gillis, Arts	*Newport*	Park Street
Hathaway, Florence Adelle, Arts	*Bangor*	R.F.D. #7, Hammond Street, Bangor
Hatt, Roy James, Jr., Arts	*Brewer*	Whiting Hill, Brewer
Hayes, Helen Virginia, He.	*Bangor*	15 Stone Street, Bangor
Healy, Robert Morris, Arts	*Augusta*	206 Oak Hall
Henderson, Sherwood William, Me.	*Anson*	102 Mill Street
Hepburn, William George, Me.	*South Portland*	85 Main Street
Herrick, Carleton Sewall, Jr., Arts	*South Brewer*	61 Elm Street, South Brewer
Hersey, Richard Winslow, Fy.	*Portland*	100 Mill Street
Higgins, Irwin Raymond, Agr.	*Mapleton*	25 Grove Street
Higgins, Joseph Scott, Agr.	*Dennysville*	408 Oak Hall
Hinckley, Marcia, He.	*South Portland*	The Maples
Hines, Marion Ruth, Arts	*Middletown, Conn.*	The Maples
Hodgkins, Earl Littlefield, Ce.	*Northeast Harbor*	Stillwater
Hodgkins, Nathan Gerard, Eng.	*Salisbury Cove*	24 Oak Street
Hodgkins, Winfield Chester, Ch.Eng.	*Bar Harbor*	307 Oak Hall
Holmes, Edna Frances, He.	*Limerick*	North Hall
Holmes, Robert Goodwin, Ee.	*Guilford*	202 Oak Hall
Hood, Natalie Ruth, Arts	*New Gloucester*	The Maples
Hopkins, Harry Saunders, Me.	*Brooklin*	309 H. H. Hall
Hopkinson, David Bradford, Me.	*Portland*	208 H. H. Hall
Horn, Gilman David, Ch.Eng.	*Portland*	305 Oak Hall
Hornbeck, Hulet Clark, Fy.	*Bloomfield, N. J.*	5 Forest Avenue
Horton, James Bartlett, Ch.Eng.	*Brewer*	113 Chamberlain Street, Brewer
Houghton, John William, Agr.	*Fort Fairfield*	404 Oak Hall
Houston, John, Arts	*Guilford*	311 Oak Hall
Howe, Allan Morton, Ce.	*Cooper*	56 North Main Street
Huff, Donald Hartley, Eng.	*Cape Porpoise*	410 H. H. Hall
Hurd, Ellen Rae, Arts	*Orono*	82 Main Street
Hurwitz, Aaron Sumner, Arts	*Roxbury, Mass.*	407 H. H. Hall

Ingraham, Mark Whitmore, Jr., Ce.	*Rockport*	College Road
Irvine, William Lloyd, Arts	*Framingham, Mass.*	209 Oak Hall
Jacobs, Edith, Arts	*West Baldwin*	North Hall
Jellison, Elizabeth, Arts	*Boothbay Harbor*	The Maples
Johnson, Allan Wilson, Arts	*Poland*	51 North Main Street
Johnson, Barbara Elaine, Arts	*Lincolnville*	R.F.D. #8, South Brewer
Johnson, Donald Keith, Me.	*Augusta*	45 Mill Street
Johnson, Herbert Harrison, Fy.	*Onawa*	111 H. H. Hall
Johnson, Russell Goodwin, Ch.Eng.	*Sanford*	210 H. H. Hall
Jones, Clarence Wayland, Eng.	*Rumford*	307 H. H. Hall
Jose, Russell David, Fy.	*Waterville*	80 North Main Street
Kaplan, Harold Irving, Me.	*Roxbury, Mass.*	12 Pleasant Street
Karczmarczyk, Joseph, Arts	*Ludlow, Mass.*	402 H. H. Hall
Katz, Risha Gertrude, Arts	*Brookline, Mass.*	The Maples
Keenan, John Frederick, Arts	*Cape Elizabeth*	103 H. H. Hall
Kelley, Robert Edward, Ee.	*Lisbon Falls*	302 Oak Hall
Kelso, Frederick John, Ch.Eng.	*Bangor*	298 Center Street, Bangor
Keniston, Charles Thomas, Ee.	*Bridgton*	Stillwater
Kenney, James Francis, Jr., Arts	*Howland*	6 Mayo Street
Kenny, Margaret Ellen, Arts	*Orono*	6 Mayo Street
Kierstead, Edward Stevens, Agr.	*Bucksport*	210 H. H. Hall
Kilpatrick, Donald Murray, Agr.	*Caribou*	207 H. H. Hall
Kimball, Dean Cushman, Fy.	*Beverly, Mass.*	5 Forest Avenue
King, Hazel Thelma, He.	*Saco*	North Hall
King Jane, He.	*Medford, Mass.*	The Elms
King, Phyllis Muriel, Arts	*Harpswell Center*	258 Center Street, Old Town
Kingsley, Cortna Mae, Arts	*Strong*	The Maples
Kinsey, Winifred Rose, Arts	*Old Town*	18 High Street, Old Town
Knaut, Paul Allen, Jr., Agr.	*Quincy, Mass.*	380 College Road
Knowles, Irene Mae, Arts	*Presque Isle*	The Maples
Koehler, Audrey Mae, He.	*Orono*	430 College Road
Koialovitch, Frederick Charles, Eng.	*Waterville*	209 H. H. Hall
Kopelow, Lillian Marion, Arts	*Bangor*	196 Harlow Street, Bangor
Kroepsch, Kay Ward, Pa.	*Bennington, Vt.*	395 College Road

Lawry, Otis Charles, Me.	*Fairfield*	312 H. H. Hall
Leavitt, Booth Gilman. Ch.Eng.	*Madison*	University Cabin
Leavitt, Laurence Gilmore, Ch.Eng.	*Orono*	7 Park Street
Leger, Eugene, Eng.	*Newton Center, Mass.*	411 H. H. Hall
Levene, Victor Eugene, Agr.	*Chelsea, Mass.*	301 Oak Hall
Lewis, Beulah Theresa, He.	*Newport*	The Maples
Libby, Frederick Andrew, Fy.	*Walpole, Mass.*	Θ X House
Libby, Marion Jordan, He.	*Milford*	Milford
Libby, Willis Edward, Jr., Ce.	*Freeport*	211 H. H. Hall
Limberis, George Peter, Ch.Eng.	*Bangor*	21 First Street, Bangor
Linnell, Sally Wilder, Arts	*Pembroke*	North Hall
Lipman, Henry Harris, Agr.	*Chelsea, Mass.*	109 Oak Hall
Littlefield, Waldemar Vickery, Me.	*Brewer*	92 Chamberlain Street, Brewer
Lombard, Virginia Rae, Arts	*Meddybemps*	North Hall
Long, Lois, He.	*Melrose, Mass.*	The Maples
Lord, Lionel Everette, Eng.	*Oakfield*	304 H. H. Hall
Loring, Charles Brooks, Ch.Eng.	*Yarmouth*	401 H. H. Hall
Loring, Ruth Eileen, He.	*Orono*	79 Bennoch Street
Lovley, Vaughn Tru, Agr.	*Presque Isle*	25 Grove Street
Lown, Bernard, Arts	*Lewiston*	407 H. H. Hall
Lundgren, Marion Christene, Arts	*New Sweden*	North Hall
Luther, Radford Weston, Me.	*Hartford, Conn.*	107 Oak Hall
McCarthy, Thomas Edward, Arts	*Elmhurst. N. Y.*	202 H. H. Hall
McConnell, Mary Elizabeth, He.	*Portage*	North Hall
McGraw, Richard Bernard, Ce.	*Portland*	304 Oak Hall
McKay, Donald Hill, Me.	*Old Town*	64 Bradbury Street, Old Town
McKenney, David Harrison, Arts	*Jay*	403 Oak Hall
MacKenzie, Alexander William, Fy.	*Winchester, Mass.*	104 H. H. Hall
McKusick, Louise Ida, Arts	*Dexter*	74 North Main Street
McLean, Harris Linwood, Jr., Arts	*Bar Harbor*	111 H. H. Hall
MacLeod, Leo Mansell, Arts	*Bangor*	21 Middle Street, Bangor
McNeilly, Richard Stanfield, Fy.	*Winchester, Mass.*	401 Oak Hall
Malcolm, Ian, Fy.	*Charlemont, Mass.*	80 Mill Street
Mank, Miles Boggs, Arts	*Augusta*	110 Oak Hall
Marriner, Donald Eugene, Ch.Eng.	*Rockland*	102 H. H. Hall
Marsh, Norman Frank, Ch.Eng.	*Bangor*	26 Autumn Street, Bangor

Martin, Lyle Lynwood, Ce.	*St. Albans*	University Cabin
Matthews, Royal Russell, Jr., Eng.	*Lisbon Falls*	212 H. H. Hall
Maurice, David, Arts	*Dorchester, Mass.*	12 Pleasant Street
May, Virginia Edith, Arts	*Wellesley Farms, Mass.*	The Maples
Mayhew, Walter Edward, Ee.	*Old Town*	42 Stillwater Avenue, Old Town
Mayo, John Hildreth, Agr.	*Providence, R. I.*	101 Oak Hall
Medina, John Warren, Ch.Eng.	*Waltham, Mass.*	311 Oak Hall
Mehann, Helen Winifred, He.	*Bangor*	29 Harthorn Avenue, Bangor
Melnick, Robert Joseph, Arts	*Portland*	75 Forest Avenue
Merrill, Howard Weld, Eng.	*Old Town*	18 High Street, Old Town
Mertens, Eugene George, Arts	*Yonkers, N. Y.*	409 H. H. Hall
Messer, Marguerite Sylvia, Arts	*Waban, Mass.*	The Maples
Millar, Edward Reid, Eng.	*Leonia, N. J.*	80 North Main Street
Millar, Robert Randolph, Ch.Eng.	*Leonia, N. J.*	69 Forest Avenue
Miniutti, Gloria Mary, Arts	*North Berwick*	The Maples
Miniutti, Victor Pascal, Fy.	*North Berwick*	212 H. H. Hall
Mitchell, Frederick Arthur, Ee.	*Kingfield*	25 Grove Street
Mitchell, Robert Allen, Arts	*Bar Harbor*	309 Oak Hall
Moody, Hope, He.	*Lincoln*	North Hall
Moore, Thomas Fogg, Arts	*Biddeford*	204 H. H. Hall
Morris, Sumner David, Ch.Eng.	*Guilford*	45 Maple Street, Bangor
Morrison, James Linton, Ch.Eng.	*Worcester, Mass.*	29 Pond Street
Moulton, Irving Clyde, Jr., Ce.	*Guilford*	301 H. H. Hall
Moulton, Margaret, Arts	*Bangor*	The Elms
Moulton, Parker Nash, Jr., Arts	*Wareham, Mass.*	85 Main Street
Moulton, Virginia, Arts	*Bangor*	The Elms
Mullen, Joseph Norman, Jr., Arts	*Houlton*	105 Oak Hall
Mullin, George Albert, Arts	*Holbrook, Mass.*	403 H. H. Hall
Mulvany, Jane, Arts	*Bangor*	57 Pearl Street, Bangor
Munce, George Edward, Arts	*Bangor*	81 Birch Street, Bangor
Murdock, Henry Thayer, Ch.	*Kennebunk*	408 Oak Hall
Murphy, George Vincent, Ce.	*Bar Harbor*	111 H. H. Hall
Murphy, Paul Edward, Arts	*Lewiston*	7 Kell Street
Neal, Allan Johnson, Jr., Agr.	*Bangor*	324 Essex Street, Bangor
Nichols, Clarence Sidney, Jr., Ch.Eng.	*Augusta*	402 Oak Hall

Nowell, Carleton Wayne, Ch.Eng.	*York Village*	301 H. H. Hall
Nye, Dana Hammond, Pa.	*Waterbury, Conn.*	395 College Road
O'Keefe, Robert Edward, Me.	*Old Town*	63 Bradbury Street, Old Town
Olsen, Einar Arthur, Fy.	*Gloucester, Mass.*	395 College Road
Page, Jane Augusta, Arts	*Newcastle*	The Elms
Paine, Anna Eleanor, Arts	*Bangor*	The Elms
Peabody, Ruth Frances, Arts	*Houlton*	The Maples
Perry, Barbara Louise, Arts	*Houlton*	The Maples
Perry, Frederick Mauran, Ee.	*Rockland*	86 Mill Street
Perry, William Louis, Arts	*Portland*	Park Street
Peterson, Clarence Ames, Agr.	*Rockland*	301 H. H. Hall
Peterson, Frank Harvey, Me.	*Vinalhaven*	301 H. H. Hall
Petterson, Leonard Martin, Arts	*Deep River, Conn.*	302 H. H. Hall
Phelan, Paul Henry, Arts	*Calais*	312 Oak Hall
Philbrook, Nancy Clara, He.	*Shelburne, N. H.*	The Maples
Phillips, Margaret Goldie, He.	*Ellsworth*	North Hall
Phillips, Stanley Gilkey, Jr., Eng.	*Melrose, Mass.*	312 H. H. Hall
Pierce, Martha Elizabeth, Arts	*Guilford*	North Hall
Pierce, Philip Nason, Eng.	*Gardiner*	208 Oak Hall
Pinette, Marie Cecile, Arts	*Guilford*	20 Forest Avenue
Piper, George Francis, Eng.	*Biddeford*	209 H. H. Hall
Pitman, Arnold William, Agr.	*Appleton*	25 Grove Street
Pitts, Edgar Thurlow, Arts	*Stonington*	302 H. H. Hall
Pollock, Thomas Edwin, Arts	*Somerville, Mass.*	18 Oak Street
Potter, Frank Elwood, Agr.	*Sabattus*	395 College Road
Pratt, Darrell Bradford, Agr.	*Millinocket*	412 H. H. Hall
Pratt, Muriel Elizabeth, He.	*Oxford*	15 Pierce Street
Pratt, Winthrop Bowman, Eng.	*Arlington, Mass.*	308 Oak Hall
Priest, Clifford Alvin, Fy.	*Bradford, Mass.*	29 Forest Avenue
Pulsifer, Allen Hallett, Me.	*Poland*	207 Oak Hall
Putnam, Aaron Hacker, Ch.Eng.	*Houlton*	302 H. H. Hall
Rainey, Thelma Fannie, Arts	*Frankfort*	35 Grove Street
Ramsdell, Gordon Estey, Agr.	*Ellsworth*	25 Grove Street
Ramsey, Raymond Edward, Ee.	*Bath*	395 College Road
Randall, Dorothy Edith, Arts	*Oakland*	North Hall
Randall, Warren Batchelder, Pa.	*Lewiston*	405 Oak Hall

Rankin, Austin Edwin, Jr., Eng.	*Camden*	410 Oak Hall
Reed, James Alden, Eng.	*Boothbay*	405 H. H. Hall
Reed, John Hathaway, Agr.	*Fort Fairfield*	403 H. H. Hall
Reggio, Andre William, Jr., Fy.	*Chestnut Hill, Mass.*	304 Oak Hall
Remick, Charles Edward, Agr.	*Ellsworth*	25 Grove Street
Rice, Virgil Wilder, Jr., Agr.	*Northfield*	Park Street
Richards, Lee Warren, Jr., Arts	*Augusta*	410 H. H. Hall
Riese, George Augustus, Jr., Me.	*Arlington, Mass.*	303 H. H. Hall
Ripanti, Nello Frank, Ch.Eng.	*Hopedale, Mass.*	25 Grove Street
Roben, George Douglass, Ch.Eng.	*Houlton*	404 H. H. Hall
Roberts, Daniel Cogswell, II, Pa.	*Peoria, Ill.*	303 H. H. Hall
Roberts, James Herbert, Ch.Eng.	*Belfast*	402 H. H. Hall
Roberts, Reginald Thomas, Me.	*Locke Mills*	88 Park Street
Robertson, Edward Norris, 2nd, Eng.	*Bethel*	411 Oak Hall
Robie, John William, Arts	*Augusta*	204 Oak Hall
Robinson, Preston Earl, Eng.	*Bangor*	99 Webster Avenue, Bangor
Robinson, Winona Elizabeth, He.	*Warren*	The Maples
Roche, John Charnley, Pa.	*Torrington, Conn.*	303 H. H. Hall
Rodman, Arlene Ruth, Arts	*Bangor*	The Elms
Rollins, Ann, Arts	*Ellsworth*	The Maples
Rome, Bernard Phillip, Arts	*Brookline, Mass.*	12 Pleasant Street
Ross, Annie Estella, He.	*West Lubec*	North Hall
Ross, Donald Philip, Ce.	*Orono*	356 College Road
Rourke, Alice Virginia, Arts	*Winthrop*	North Hall
Rowe, Barbara Marie, Arts	*Rumford*	15 Pierce Street
Rowe, Harlan Orrington, Agr.	*East Stoneham*	25 Grove Street
Rowell, Lorraine Alberta, Arts	*Saco*	North Hall
Roy, Robert Francis, Ch.Eng.	*Norway*	205 Oak Hall
Royal, Mary Arlyne, He.	*Orono*	23 Park Street
Rushworth, Cornell Cameron, Ch.Eng.	*Madison*	25 Grove Street
Russell, James Louis, Arts	*Bangor*	193 Warren Street, Bangor
Russell, Mary Emma, Ch.	*Berwick*	The Maples
Ryan, Betty Jane, Arts	*Woolwich*	The Elms
Ryan, Patricia Margaret, Arts	*Bangor*	82 Cedar Street, Bangor
Sanders, James Osborne, Me.	*Greenville*	Φ H K House
Savage, Barbara, Arts	*Bangor*	The Maples
Scammon, Elizabeth Rogers, Arts	*Owls Head*	The Maples

Schaible, William John, Ch.Eng.	*East Northport, L. I., N. Y.*	303 H. H. Hall
Scher, Martin M., Pa.	*Brooklyn, N. Y.*	12 Pleasant Street
Schertzer, Edward Abraham, Arts	*Somerville, Mass.*	12 Pleasant Street
Schillig, Nancy Magdalene, He.	*Bangor*	182 York Street, Bangor
Schmidt, Francis Victor, Fy.	*Paterson, N. J.*	395 College Road
Sewall, Calvin Brackett, Arts	*Wilton*	403 Oak Hall
Sewell, Edgar Fuller, Ch.Eng.	*Bangor*	117 Grove Street, Bangor
Shackelford, Philip Torrey, Arts	*Wenham, Mass.*	Σ N House
Shepard, Henry Moore, Fy.	*State Line, Mass.*	304 H. H. Hall
Simmons, Eleanor Rose, Arts	*Union*	North Hall
Sinclair, Richard Montague, Pa.	*Holyoke, Mass.*	107 Oak Hall
Sleeper, Thomas Till, Eng.	*Swampscott, Mass.*	406 Oak Hall
Slocum, George Chisholm, Agr.	*Worcester, Mass.*	85 Main Street
Small, Parker William, Agr.	*South Portland*	305 H. H. Hall
Small, Robert Edward, Eng.	*York Village*	304 H. H. Hall
Smith, Earle Stuart, Arts	*Winterport*	210 Oak Hall
Smith, Elmer Vincent, Me.	*Newport*	108 Oak Hall
Smith, George Henry, Me.	*Waltham, Mass.*	103 H. H. Hall
Smith, James John, Fy.	*South Portland*	86 Mill Street
Spear, Harlan Sylvester, Eng.	*Warren*	310 Oak Hall
Spear, Jasper Adriel, Arts	*Warren*	310 Oak Hall
Spencer, Beverly Wellington, Arts	*Great Works*	Great Works
Stahl, Jacob Irving, Arts	*Peabody, Mass.*	211 H. H. Hall
Stanton, Harold Troutt, Jr., Ee.	*Bath*	109 H. H. Hall
Stevens, Virginia Charlotte, He.	*Old Town*	190 North Fourth Street, Old Town
Stewart, Loren Francis, Ch.Eng.	*Orono*	405 Oak Hall
Stone, Beth Ward, Arts	*Detroit*	10 Holyoke Street, Brewer
Stone, Lois Louisa, Arts	*Clinton, Mass.*	The Maples
Stone, Theodore Miles, Fy.	*Milford*	Milford
Striar, David Phillip, Arts	*Bangor*	14 Adams Street, Bangor
Susi, Roosevelt Theodore, Arts	*Pittsfield*	111 Park Street
Suslavich, John Joseph, Ce.	*Hudson, Mass.*	404 H. H. Hall
Svedeman, Stuart Frank, Fy.	*East Milton, Mass.*	203 H. H. Hall
Sylvester, Neva Lorraine, Arts	*Deer Isle*	The Maples
Talbot, Richard Morris, Eng.	*Erie, Pa.*	306 H. H. Hall

Talbot, William Burrall, Arts	*East Machias*	210 H. H. Hall
Tanner, Edward Russell, Arts	*Philadelphia, Pa.*	401 H. H. Hall
Tarbox, Fred Snow, Eng.	*Biddeford*	395 College Road
Taylor, Charles John, Ch.Eng.	*Bangor*	15 McKinley Street, Bangor
Taylor, Mark Albert, Me.	*Newport*	12 Park Street
Teague, Ella Elizabeth, He.	*North Turner*	15 Pierce Street
Teall, Arthur Leu, Ee.	*Glen Ridge, N. J.*	212 Oak Hall
Terrio, Mary Elizabeth, He.	*Houlton*	The Maples
Thomas, Raymond Perle, Me.	*Belfast*	344 South Main Street, Old Town
Thompson, Elmer Patterson, Me.	*Brownfield*	304 H. H. Hall
Thompson, Gordon John, Ch.Eng.	*Rockland*	208 Oak Hall
Thompson, Keith Marston, Agr.	*Limestone*	211 H. H. Hall
Thorndike, Clara Helen, He.	*Camden*	The Maples
Thorne, Cherrie Madeline, He.	*St. Albans*	The Maples
Thornton, Seth Winfield, Ch.	*Belfast*	402 H. H. Hall
Thurlow, Priscilla Emery, He.	*Buckfield*	The Maples
Towne, Ruth Anna, Arts	*East Dover*	North Hall
Tozier, Priscilla Ann, Arts	*Augusta*	The Maples
Tracy, John Paul, Arts	*Lexington, Mass.*	12 Kell Street
Trefethen, Parker Scott, Fy.	*Wilton*	College Road
Tukey, Howard George, Arts	*Cape Elizabeth*	395 College Road
Tukey, Spaulding Murray, Ch.	*Cape Elizabeth*	100 North Main Street
VanHoesen, Ellis Rugg, Arts	*Delmar, N. Y.*	430 College Road
Verenis, Peter Constantino, Arts	*Norway*	411 H. H. Hall
Ward, Eleanor Louise, Arts	*Fitchburg, Mass.*	32 College Road
Warren, Betsy Trott, Arts	*Skowhegan*	The Elms
Warren, Dorothy Lois, Arts	*Lubec*	The Elms
Warren, Harold Ernest, Ch.Eng.	*Lisbon Falls*	112 Oak Hall
Warren, Richard Lucius, Eng.	*Portland*	309 H. H. Hall
Waterman, George Walter, Eng.	*New Gloucester*	206 Oak Hall
Watson, John Thaxter, Arts	*Bangor*	104 Poplar Street, Bangor
Watson, Robert John, Arts	*Farmington*	209 H. H. Hall
Watters, Alwyn Signa, Me.	*Madawaska*	15 Park Street
Webber, George Franklin, Me.	*Pittsfield*	407 Oak Hall
Webster, Arlene Janet, He.	*Auburndale, Mass.*	The Maples

Weed, Edward Augustus, Jr., Arts	*Newport*	108 Oak Hall
Welch, Charles Franklin, Eng.	*Pittsfield*	85 Main Street
Wellcome, Frank Lindsay, Jr., Ch.Eng.	*Cumberland Mills*	409 Oak Hall
Wescott, Franklin Smith, Me.	*Bluehill*	309 H. H. Hall
Weston, Donald Edward, Eng.	*Portland*	310 H. H. Hall
Weston, Virginia, He.	*Dover-Foxcroft*	North Hall
Weymouth, Helen Moore, Arts	*Waterville*	The Maples
White, Mary Louise, Arts	*Orono*	48 Forest Avenue
White, Preston Albert, Agr.	*Ellsworth*	R.F.D. #7, Bangor
White, Roger Edward, Ee.	*South Portland*	310 H. H. Hall
Whited, Harris Goodwin, Agr.	*Bridgewater*	7 Kell Street
Whitney, Richard Walker, Arts	*Marblehead, Mass.*	309 H. H. Hall
WiedenKeller, Paul Theodore, Arts	*Smithtown Branch, L. I., N. Y.*	85 Main Street
Wiedmer, Jack Bernard, Me.	*Glen Head, N. Y.*	85 Main Street
Wiggins, Lyle Dalton, Agr.	*Houlton*	310 H. H. Hall
Wight, Kent Mansfield, Agr.	*Madison*	74 North Main Street
Wight, Muriel Leone, Arts	*Madison*	74 North Main Street
Willetts, Fred Morgan, Agr.	*Cheshire, Conn.*	408 H. H. Hall
Wilson, Raymond Edwin, Ch.Eng.	*Madison*	203 Oak Hall
Wing, Morris Reynolds, Fy.	*Bingham*	7 Forest Avenue
Wing, Norman Adelbert, Agr.	*Monmouth*	111 Park Street
Winters, Gordon Henry, Eng.	*Waterville*	401 H. H. Hall
Witman, George Francis, Ce.	*Portland*	18 Oak Street
Woodbury, Ralph Eugene, Ch.Eng.	*Portland*	24 Oak Street
Woodbury, Stephen Edward, Eng.	*Beverly, Mass.*	110 Oak Hall
Woodward, Homer Clay, Ch.Eng.	*Newport*	305 Oak Hall
Woodward, Janice Dean, He.	*Auburn*	15 Pierce Street
Worster, Arthur Roscoe, Eng.	*Madison*	University Cabin
Young, Mary Alice, Arts	*Winterport*	North Hall

SPECIALS

Brimmer, George Robertson, Arts	*Brewer*	24 Holyoke Street, Brewer
Chaplin, Mortimer Walter, Ht.	*Cumberland Mills*	K Σ House
Cooper, James Gordon, III, Hy.	*Orono*	188 Main Street
Curley, John Irvine, Jr., Eng.	*Rumford*	K Σ House
Davies, William Ellis, Pl.	*Orono*	8 Juniper Street
Dillon, John Michael, Arts	*Naugatuck, Conn.*	306 Oak Hall

Dole, Francis Henry, Ch.	*Bangor*	R. #2, Bangor
Etter, Howard Ernest, Eng.	*Bar Harbor*	98 Mill Street
Evans, Weston Sumner, Arts	*Orono*	8 Kell Street
Franck, Elaine Marianne, Rl.	*Bordeaux, France*	Balentine Hall
Godwin, H. Buel, Arts	*Orono*	106 North Main Street
Hagensen, Philip Leonard, Ce.	*Bangor*	38 Sixth Street, Bangor
Hathaway, Henry Lloyd, Me.	*Winterport*	Campus
Hitchner, Barbara Dunn, Ed.	*Orono*	51 Bennoch Street
Hunt, Mansfield Laurence, Ed.	*Mexico*	Park Street
Kierstead, Edith Elaine, Arts	*Bluehill*	23 Pond Street
Lendo, Alexander Chester, Ed.	*Orono*	225 Main Street
MacLean, Vesta Isabelle, Eh.	*Raymond*	11 Main Street
McNulty, James Matthew, Jr., Ch.Eng.	*Milford*	Milford
Merchant, Joseph Warren, Arts	*Freedom*	288 Union Street, Bangor
Miller, David George, Arts	*Bangor*	46 Blackstone Street, Bangor
Milliken, Cooper, Eng.	*Old Town*	14 Oak Street, Old Town
Morrison, James Bryan, Jr., Ed.	*Dexter*	Φ K Σ House
Olander, Paul Herbert William, Sy.	*Ellsworth*	Ellsworth
Owens, Thomas William, Jr., Ht.	*Portland*	Φ H K House
Perry, Orin Francis, Ch.	*Dobbs Ferry, N. Y.*	K Σ House
Potter, Harold Colby, Arts	*Bar Harbor*	3 Park Street
Ricker, Ellery Tuttle, Ed.	*Bangor*	70 Savage Street, Bangor
Rogers, Marion Elizabeth, Ch.A.	*Orono*	57 College Road
Soule, Albert Boyd, Eng.	*Gorham*	86 Mill Street
Stephenson, Leonidas Dacosta, Eng.	*Old Town*	195 Middle Street, Old Town
Treat, George Currier, Me.	*Bangor*	66 Kenduskeag Avenue, Bangor
Weed, Norman, Arts	*Bangor*	14 Fifth Street, Bangor
Willey, Baxter Leone, Ch.Eng.	*Cherryfield*	43 Peters Street

TWO-YEAR COURSE IN AGRICULTURE

First Year

Bailey, Merwin Frank	*East Haven, Conn.*	34 Pine Street
Baker, Philip George	*Orono*	106½ North Main Street
Bessom, Edward Anthony	*South Orleans, Mass.*	104 H. H. Hall

Billings, Percy Glenwood, Jr.	*Bangor*	20 Sixth Street, Bangor
Cunningham, Judson Bradford	*Patten*	38 Grove Street
Cushman, George Bernard	*Bryant Pond*	25 Grove Street
Dahlin, Russell John	*Caribou*	Farm Boarding House
Day, Harland Elmore	*Strong*	407 Oak Hall
Day, Robert Hartson	*Bryant Pond*	25 Grove Street
Donovan, Albert Thomas	*Houlton*	25 Grove Street
Dow, John Arthur	*Thomaston*	25 Grove Street
Emmons, Leavitt	*Saco*	University Cabin
Felt, Linwood Newton	*Bryant Pond*	25 Grove Street
Fletcher, Amos Harold	*Caribou*	204 H. H. Hall
Grant, Robert Hutchinson	*Silver's Mills*	395 College Road
Hamlin, Stephen Clark	*Orono*	158 Main Street
Hawkes, Ronald Morrill	*Gorham*	204 Oak Hall
Holman, Arlie Buckman	*Mexico*	Stillwater
Libby, William Lorenzo	*Bangor*	203 Fountain Street, Bangor
McGrath, James Robert	*Brooklyn, N. Y.*	102 H. H. Hall
McKenney, Omar Walter	*Clinton*	88 Park Street
Mayo, Richard Goodwin	*Brewer*	137 Wilson Street, Brewer
Mitchell, Theodore Norris	*Old Town*	Indian Island, Old Town
Pottle, Maurice Allen	*Lincolnville*	25 Grove Street
Powers, Roland Linwood	*Medway*	25 Grove Street
Randall, Halston Blackstone	*Caribou*	412 H. H. Hall
Rankin, Earle Alfred	*Melrose, Mass.*	210 Oak Hall
Sapiel, David Anthony	*Old Town*	Indian Island, Old Town
Spalding, James Herbert, Jr.	*Balboa Heights, C. Z.*	311 H. H. Hall
Stevens, Joseph Benjamin	*Vassalboro*	25 Grove Street
Stuart, Donald Ellis	*Bangor*	148 Ohio Street, Bangor
Wallace, Robert David	*Limerick*	9 Forest Avenue
Washburn, Robert Rider	*Monmouth*	111 Park Street
Woods, Alan Fairbank	*West Hartford, Conn.*	430 College Road
York, Donald Colby	*Windsorville*	404 H. H. Hall

Second Year

Bishop, Robert Edward	*Caribou*	Φ H K House
Boulos, Joseph Sebastian	*Portland*	6 Mill Street
Burpee, Howard Lemuel	*Orono*	Bennoch Street

Conley, Edward Merrill	*Bangor*	R.F.D. #7, Bangor
Dunning, Clement Stevens	*North Harpswell*	Bennoch Street
Elwell, Ralph Horatio	*Brooks*	25 Grove Street
Farrington, Harold Edward, Jr.	*Portland*	Α Γ Ρ House
Hardy, William Robert	*Hope*	25 Grove Street
Kimball, Gerald Winston	*Bangor*	R.F.D. #7, Bangor
Meara, Richard Courtney	*Poughkeepsie, N. Y.*	86 Mill Street
Sylvester, Frederick Hudson	*Ashland*	College Road
Taylor, Stewart Glenwood	*Cape Elizabeth*	Α Χ Α House
True, Frank Asia	*Springfield*	25 Grove Street

SHORT COURSE IN AGRICULTURE

Barnwell, Vincent George, Unit No. 1 and No. 2	*Temple*	505 College Road
Blodgett, Richard Malcolm, Unit No. 1 and No. 2	*Temple*	505 College Road
Gaddis, Harry Thomas, Unit No. 1 and No. 2	*Woodland*	17 Margin Street
Jasud, Walter Louis, Unit No. 1 and No. 2	*Peru*	Kell Street
McAvoy, Basil Raymond, Unit No. 1 and No. 2	*Benedicta*	25 Grove Street
Mitchell, Frederick Emerson, Unit No. 1 and No. 2	*Sabattus*	17 Margin Street
Randolph, Burnham Norbeck, Unit No. 1 and No. 2	*Caribou*	66 Park Street
Rush, Edward Gregory, Unit No. 1 and No. 2	*Benedicta*	66 Park Street
Seile, Benedict, Unit No. 1 and No. 2	*Benedicta*	25 Grove Street
Severy, Donald Onslow, Unit No. 1	*Sabattus*	88 Park Street
Smith, Sydney Herbert, Unit No. 1	*Waterville*	43 Mill Street
Stetson, Donald Charles, Unit No. 2	*Mt. Vernon*	12 Kell Street
Stewart, Doris Myers, Unit No. 1 and No. 2	*Lincolnville*	15 Pierce Street

SPRING SEMESTER, 1939

New Registrations

Graduate Students

Berzon, Bernard L., B.A., Es. Yeshiva, 1935	*Bangor*	277 Pine Street, Bangor
Ellis, Gilman Clendenen, A.B., Zo. Bowdoin, 1935	*Portland*	105 Main Street
Fairley, William Edwin, A.B., Ed. Amherst, 1937	*South Brooksville*	56 North Main Street
King, Delmar Harding, B.S., Ed. Bowdoin, 1925	*Steuben*	505 College Road
Moore, Millard George, B.S., M..S, By. Maine, 1919, 1930	*Old Town*	178 Stillwater Avenue, Old Town
Potter, Willard, Ph.B., A.M., Ed. Brown, 1926; Virginia, 1938	*Forest City*	30 Main Street
Somers, Dorothy Marie, B.S., M.S., He. Maine, 1932, 1934	*Bangor*	89 Howard Street, Bangor

Seniors

Clark, Albert Lewis, Fy.	*Camden*	Φ K Σ House
Dalzell, Margaret Elizabeth, Ed.	*Unity*	81 North Fourth Street, Old Town
Darroch, William Clifton, Ed.	*Princeton*	25 Grove Street
Dow, James Frederick, Me.	*Houlton*	Φ Γ Δ House
Frost, Mary Eldridge, He.	*York Village*	23 Pond Street
Pillsbury, John Wallace, Ed.	*Benton Station*	43 Mill Street
Shaw, Beulah Lilah, He.	*Freeport*	20 Forest Avenue
Woodland, Edwin Conrad, Dt.	*Watertown, Mass.*	K Σ House

Juniors

Cameron, John Robert, Ce.	*Newport, N. H.*	Λ X A House
Gleason, Lawrence John, Ce.	*Bangor*	95 Otis Street, Bangor
Hoctor, John Michael, Ed.	*Old Orchard Beach*	3 Park Street
LaBarge, Bernard Aloysius, Es.	*Bucksport*	Φ Γ Δ House
Milliken, Wendall Seavey, Fm.	*Portland*	3 Park Street
Thurston, Frederick Clark, Eh.	*Bangor*	20 Adams Street, Bangor

Sophomores

Dalrymple, Stewart Willard, Me.	*Newton Centre, Mass.*	Λ X Λ House
Enman, Edgar Ellis, Ee.	*Bangor*	64 West Broadway, Bangor
Leek, Spencer Simmons, Fm.	*Bangor*	61 Hersey Avenue, Bangor
Perry, Clarence Merrill, Ed.	*Hartland*	Kell Street
Robertson, Frank Cole, Fy.	*Leominster, Mass.*	77 Mill Street
Wallace, Henry William, Me.	*Freeport, L. I., N. Y.*	24 University Place

Specials

Briscoe, Eleanor Louisa, Zo.	*Orono*	380 College Road
Cotes, Kermit Rodney, Ch.Eng.	*Derby*	48 First Street, Derby
Downing, Robert Briggs, Ed.	*Bangor*	107 Grove Street, Bangor
Farwell, Kathleen, Sy.	*Bangor*	110 Lincoln Street, Bangor
Gordon, Hyma Alton, Eng.	*Lincoln Center*	25 Grove Street
Hess, Marian Johnson, Arts	*Orono*	12 Middle Street
Marr, James Archibald, Ed.	*Millinocket*	Φ H K House
Mills, Nathaniel, Jr., Arts	*Bangor*	191 Center Street, Bangor
Pierce, Leonard Augustus, Agr.	*Houlton*	14 Park Street
Trefethen, Joseph Muzzy, Ce.	*Orono*	24 Forest Avenue
Young, Stanley Paul, Ed.	*Orono*	83 Park Street

Two-Year Course in Agriculture

Second Year

Cornish, Alfred Cumston	*Brunswick*	Δ T Δ House
Scott, Edward Conant	*Presque Isle*	Φ H K House

SUMMER SESSION, 1938

Students Registered for Graduate Credit

Allen, Alden Watts, B.S., Ed. Colby, 1916	*Calais*
Allen, Irene, B.S. in Ed., Hy. Boston University, 1930	*Somerville, Mass.*
Alley, Eva Lucille, A.B., Ed. Colby, 1925	*Calais*

Andrews, Roland B., B.S., Ed. *Lee*
Colby, 1928
Avery, William Bailey, B.S., M.S., Ch. *Sandy Point*
Brown, 1926
Baker, Pauline, B.S. in Ed., Eh. *Margate, N. J.*
Trenton State Teachers College, 1933
Bartlett, Rodney Hall, B.S., Ed. *Stamford, N. Y.*
Ithaca College, 1935
Bechtel, William Henry, B.A., Pa. *Dubuque, Iowa*
Dubuque, 1936
Berry, Kathleen Maudmore, B.S., He. *Cornish*
Farmington Normal, 1935
Berzon, Bernard L., B.A., Es. *Bangor*
Yeshiva College, 1935
Boston, Josiah Winner, B.S., Ed. *Milford, Del.*
St. John's College, 1924
Brackett, Madalene, B.A., Ms. *Milo*
Maine, 1925
Braidy, Bernice Estelle, A.B., Ed. *Bangor*
Radcliffe, 1938
Brennan, Doris Lillian, A.B., Fr. *Bristol, Conn.*
Vermont, 1932
Bridges, Mary Rita, B.S. in Ed., Ed. *Somerville, Mass.*
Bridgewater State Teachers College, 1932
Bridges, Ruth Mary, B.S. in Ed., Ed. *Somerville, Mass.*
Bridgewater State Teachers College, 1932
Brown, David Springer, B.A., Ed. *Ellsworth*
Maine, 1936
Burke, Frank Valentine, B.A., Ed. *Stoughton, Mass.*
Maine, 1924
Burr, Alice Evelyn, B.S., He. *Eastport*
Maine, 1931
Canon, Bertha Violet, B.A., Lt. *Pittsfield, Mass.*
Smith, 1912
Carpenter, Paul Nathaniel, B.S., Ed. *Mars Hill*
Bates, 1933
Carson, Harold Eugene, B.S., Ed. *Guilford*
Colby, 1928
Chambers, Kathleen Rosalind, A.B., Eh. *Ocean Park*
Barnard, 1929
Christie, Lindon E., B.S., Ed. *Monson*
Colby, 1930

Clark, Myrtes Estella, B.L., He. Wisconsin, 1900	*Oxford, Ohio*
Clements, Helen Carolyn, B.S., He. Maine, 1933	*Winterport*
Clement, Stanley Luther, B.S., Ed. Colby, 1932	*Newport*
Collins, Eugene William, A.B., Eh. Villanova, 1933	*Paulsboro, N. J.*
Conant, Priscilla Gertrude, B.S., Eh. Boston University, 1930	*Old Town*
Conley, Katharine Amanda, A.B.,. Eh. Beaver College, 1925	*Ellsworth*
Cooke, Caroline Vaile, B.S. in Ed., Lt. Boston University, 1927	*Brookline, Mass.*
Cox, Edwin Allerton, B.S. in Ed., Ed. Boston University, 1932	*Montague, Mass.*
Crandon, Harry Drew, B.S., Ch. Maine, 1929	*Stillwater*
Crocker, Richard Foster, B.S., Ed. Maine, 1914	*Fort Kent*
Crockett, Guy Harmon, B.S., Py. New Hampshire, 1935	*Sebec Station*
Crockett, Wilbury Arthur, B.A., Ed. Maine, 1934	*Brewer*
Cronkite, Clayton Russell, B.S., Ed. Maine, 1936	*Skowhegan*
Croxford, Paul Marks, B.A., Ed. Maine, 1934	*North Penobscot*
Cumming, George Jordan, B.S., Ed. Bowdoin, 1921	*Rockland*
Cunningham, George Snowdeal, B.A. in Ed., Ed. Maine, 1933	*Rockport*
Curtis, Lois H., A.B., M.S., Hy. Mt. Holyoke, 1924; Illinois, 1927	*Danvers, Mass.*
Daggett, Asa Philbrook, B.A., Ed. Bowdoin, 1925	*Island Falls*
Darch, Dorothy Grace, B.S., Ed. Elmira, 1929	*Batavia, N. Y.*
Dare, Edith Garrison, B.S., M.A., Ch. Rutgers, 1932; 1934	*North Bergen, N. J.*

Davis, Charlotte Irma, B.A., Eh. *Milford*
Maine, 1937
DeLisle, Adrienne M., B.S., He. *Waterville*
Farmington Normal, 1932
Dempsey, Eleanor Hawes, A.B., Ed. *Oakfield*
Colby, 1923
Dempsey, Harold Norcross, B.S., Hy. *Oakfield*
Colby, 1920
Desjardins, Lionel Louis, B.A., Ed. *Old Town*
Maine, 1934
Donald, Edmund William, B.P.E., Ed. *Troy, N. Y.*
Springfield College, 1921
Dow, Vivian Jennie, B.A., Ed. *Stillwater*
Maine, 1936
Dowden, Dorothy, B.S., He. *Sandwich, Mass.*
Framingham State Teachers College, 1927
Dowling, Virginia, B.S., Ed. *Plymouth, Mass.*
Massachusetts School of Art, 1926
Downs, Walter Alanson, B.S. in Ed., Ed. *Kenduskeag*
Maine, 1935
Drinkwater, Vivian Marie, B.A., Ed. *Brewer*
Maine, 1931
DuBourdieu, Marion, A.B., Ed. *Bangor*
Bates, 1919
Dyas, Ruth, A.B., Ed. *Milton, Mass.*
Boston University, 1926
Dyer, Caleb Ford, B.S., Ed. *Dover-Foxcroft*
Bowdoin, 1930
Easton, Charlotte, A.B., A.M., Zo. *Greenville, S. C.*
Oberlin, 1915; 1917
Estey, Evelyn MacDonald, A.B., Fr. *Patten*
Colby, 1927
Farnham, Raymond Willard, B.S., Ed. *Brownville Junction*
Colby, 1936
Farrington, Ervin Sylvester, B.S., Ed. *Windsor, Conn.*
New Hampshire, 1932
Farris, William M., B.S. in Ed., Ed. *Windsor, Conn.*
Boston University, 1935
Finley, Raymond Stevens, B.A., Ed. *Pittsfield*
Maine, 1925
Flanagan, William, A.B., Ed. *Bangor*
Spring Hill College, 1937

Flynn, James Hammond, B.A., Ms. *Machiasport*
Maine, 1938
Flynt, Willard Curtis, A.B., Ed. *Oakfield*
Colby, 1934
Folsom, Frederick Milo, B.A., Ed. *Pittsfield*
St. Lawrence, 1933
Foss, Eleanor Frances, B.A., Ed. *Melrose, Mass.*
Wheaton, 1936
Furlong, Hazel Frances, B.S., Ed. *Gorham, N. H.*
Farmington Normal, 1930
Goldwyn, David Leonard, B.A., M..A, Ed. *Brooklyn, N. Y.*
College of the City of New York, 1920;
New York University, 1924
Gleason, Wallace Fred, Jr., B.A., Ms. *South Portland*
Maine, 1938
Grant,Wendell Russell, B.S., Ed. *Sherman Mills*
Colby, 1928
Gray, Ruth, B.A., Hy. *Old Town*
Smith, 1938
Griffin, Elizabeth Frellick, A..B, Eh. *Livermore Falls*
Mt. Holyoke, 1920
Griffin, Gertrude Louisa, B.S., M.A., He. *St. Petersburg, Fla.*
Kentucky, 1928; 1931
Griffin, Martha Grace, A.B. in Ed., Ed. *St. Petersburg, Fla.*
Kentucky, 1933
Griffin, Stephen Augustus, B.A., Ed. *Livermore Falls*
Maine, 1922
Groff, Mary Spotten, B.A., Eh. *Columbia, Pa.*
Lebanon Valley, 1934
Guyette, George Francis, Ph.B., Ed. *Woonsocket, R. I.*
Brown, 1928
Hahn, Helen Moister, B.S., Ed. *Brooklyn, N. Y.*
Pratt Institute, 1938
Hall, Nell Barton, A.B., He. *Rockford, Ill.*
Western State Teachers College, 1927
Hamlin, Joseph Hamor, B.A., Ed. *Bar Harbor*
Maine, 1931
Harrica, Bernard P., B.S., Py. *Rouses Point, N. Y.*
St. Lawrence, 1935
Hatch, Frieda Wardwell, B..A, M..A, Ed. *Castine*
Maine, 1930; 1933

Hicks, Charles Chester, A.B., Es. *Columbia Falls*
Colby, 1931
Higgins, Milton Ermond, B.A., Ed. *Bar Harbor*
Maine, 1925
Holden, Faith Whittier, B.A., Fr. *Millinocket*
Maine, 1936
Houston, Howard Raymond, A.B., M.A., Ed. *Brewer*
Bates, 1913; Maine, 1929
Huguenin, Ramona Brown, B.A., Fr. *Old Forge, N. Y.*
Middlebury, 1927
Hunnewell, Rena Estelle, B.S., He. *Bingham*
Farmington Normal, 1936
Hunter, Helen Heyd, A.B., Es. *Freeport, N. Y.*
Adelphi, 1931
Husson, George Edwin, B.S. in Ed., Ed. *Lynn, Mass.*
Salem State Teachers College, 1926
Hyde, Nellie Adele, B.S., M.S., He. *Norfolk, Nebr.*
Nebraska, 1918; Columbia, 1927
Jacques,Charles Wesley, Jr., B.A., Ed. *Bangor*
Maine, 1936
Jaffe, Herbert, B.E., Ed. *New Britain, Conn.*
Teachers' College of Connecticut, 1937
Jenkins, William Henry, B.S. in Ed., Ed. *Fort Fairfield*
Maine, 1935
Jones, Merle Sewall, B.S., Ed. *Weeks Mills*
Maine, 1935
Jones, Serena Frances, B.R.E., M.A., Ed. *Portsmouth, N. H.*
Boston University, 1925; 1928
Kao, Yong-Tsiang, B.S., M.S., Pa. *Hongkong, China*
University of Nanking, 1936;
University of Michigan, 1938
Kauffman, Esther S., A.B., Eh. *Denton, Md.*
Washington College, 1928
Keith, Philip Edward, B.S., Ed. *Charleston*
Colby, 1926
Kilburn, Frank Macready, A.B., Ed. *Machias*
Cornell University, 1915
Kinlock, Lucy Margaret, B.S., Sy. *Brooklyn, N. Y.*
New York University, 1938
Knight, Evelyn Bertha, B.S., He. *Westbrook*
Farmington Normal, 1937

Kreeger, Mary Ann, A.B., Ed. *Chestertown, Md.*
Washington College, 1933

Legere, Ernest Henry, B.A., Fr. *Bangor*
Maine, 1928

Levin, Arthur Jesse, LL.B., Pa. *New York, N. Y.*
Boston University, 1937

Levinson, Isidor, B.S., Hy. *New Brighton, S. I., N. Y.*
New York University, 1915

Lewin, Harry Earle, A.B., Ed. *Island Falls*
Colby, 1920

Lin, Khuat-Tat, B.S., Ch.Eng. *Amoy, Fukin, China*
Chaotung University, 1936

Lloyd, Silas Manford, B.S., M.A., Ms. *Northport, N. Y.*
Mansfield State Teachers College, 1928;
Columbia, 1934

Locke, Anna, A.B., Ed. *Cambridge, Mass.*
Smith, 1935

Loud, Eleanor Beal, B.S., He. *Rockland, Mass.*
Simmons, 1931

Loveitt, Rosella Adeline, B.A., Hy. *South Portland*
Maine, 1930

Lowell, Mildred Harriet, A.B., Ed. *Lodi, N. J.*
Lebanon Valley, 1929

Lowell, Roger Dwight, A.B., Ed. *Lee*
Bowdoin, 1933

Lynk, William Alexander, B.A., B.S. in Ed., Ed. *Memphis, Tenn.*
Fisk University, 1929;
Northwestern, 1934

McIntyre, Helen Inglison, A.B., Hy. *Lexington, Mass.*
Boston University, 1924

McKechnie, Karl Harold, B.S., Ed. *Unity*
Maine, 1924

McKeen, Earle Alton, B.S., Ed. *Ashland*
Colby, 1929

MacLaughlin, Christine Marie, B.A., Ed. *Bangor*
Maine, 1927

McLean, Francis Robert, B.A., Eh. *North Dighton, Mass.*
Providence College, 1934

McMahon, Helen Mary, B.S., Ed. *West Haven, Conn.*
Tufts, 1922

McNair, Hester Margaret, B.S., He. *Derby*
Maine, 1933
Macomber, Eloise Mary, B.S., He. *North Jay*
Farmington Normal, 1936
Manwell, Joanna Mary, B.S., He. *North Monmouth*
Maine, 1918
Matheson, Murdock Scribner, B.S. in Ed., Ed. *Leominster, Mass.*
Maine, 1932
Matthews, Rachel, B.A., Ed. *Hampden Highlands*
Maine, 1930
Maxwell, Marion Duxbury, B.S., Ed. *Willimantic, Conn.*
Syracuse University, 1917
Meinecke, Charlotte Drummond, B.A., Eh. *Bangor*
Smith, 1928
Merrill, Douglas Kingston, B.S., Pa. *Ware, Mass.*
Worcester Polytechnic Institute, 1937
Merrill, Laura Abigail, B.S., He. *Bangor*
Maine, 1932
Merritt, Avis Edna, A.B., Eh. *Presque Isle*
Colby, 1935
Milbourn, Mildred Bertha, B.A., Ms. *Walton, N. J.*
Keuka College, 1928
Monroe, John Read, B.S., Ed. *Monroe*
Colby, 1925
Morrison, George Ira, B.S., Ed. *Milford, Conn.*
Maine, 1936
Mossler, Frederick Linnell, B.A., Ms. *Bucksport*
Maine, 1931
Mullaney, Ellen Mary, B.A., Ed. *Bangor*
Maine, 1930
Munyan, Viola Iydelle, B.S. in Ed., Ed. *Salem, Mass.*
Framingham State Teachers College, 1930
Murphy, Winifred Mary, B.A., Hy. *Rochester, N. Y.*
Nazareth College, 1935
Natwick, John Frank, B.A., Pa. *Wisconsin Rapids, Wis.*
Wisconsin, 1934
Newell, Harry Severy, A.B., Pa. *Orono*
Bates, 1921
Newman, Theresa Rose, B.A., Ed. *New York, N. Y.*
Hunter, 1926

Nickerson, Stella Louise, B.S., He. *Fort Fairfield*
Farmington Normal, 1933
Nitchman, Nelson Wallace, A.B., Ed. *Schenectady, N. Y.*
Union College, 1930
Norris, Helen Wright, A.B., Hy. *Denton, Md.*
Washington College, 1932
Nottage, Sereen Hamblet, B.S., Ed. *Solon*
Farmington Normal, 1933
Nutter, Jennie Louise, B.A., Hy. *Monson*
Colby, 1926
Page, Charles Everett, Jr., B.S. in Ed., Ed. *Bangor*
Maine, 1933
Parkhurst, Bertha Iona, A.B., Ed. *Thorndike*
St. Mary's College, Kansas, 1935
Percival, Maple Ismay, B.A., Hy. *Dexter*
Maine, 1929
Perlman, Rose, B.A., M.A., Eh. *Bronx, New York, N. Y.*
Hunter, 1927; New York University, 1936
Perkins, Henry Girard, B.S., Ed. *Mars Hill*
Maine, 1925
Perry, Ruth Elizabeth, B.S., He. *Orono*
Maine, 1936
Phillips, Gordon Chase, B.S., Ed. *Leominster, Mass.*
Fitchburg State Teachers College, 1934
Pierson, Gertrude Margaret, B.S., Ed. *Meriden, Conn.*
New York University, 1934
Pihl, Louise Christine, B.S.E., Ed. *East Weare, N. H.*
Lowell State Teachers College, 1936
Pollard, Barbara Alice, B.A., Eh. *Willimantic, Conn.*
Connecticut College for Women, 1931
Putnam, Donald Wallace, B.S., Ch. *Worcester, Mass.*
Worcester Polytechnic Institute, 1933
Quinn, Marion Frances, B.S. in Ed., Ed. *Bangor*
Maine, 1933
Ramage, John James, A.B., Pa. *Lowville, N. Y.*
Colgate, 1938
Randall, Adeline Gertrude, B.Ed., Ed. *Woonsocket, R. I.*
Rhode Island College of Education, 1930
Ranger, Ralph Augustine, B.S., Ed. *Fairfield*
Maine, 1921

Raymond, Gordon Byron, B.S. in Ed., Ed. *Robinsons*
Maine, 1938

Rex, Leon Peter, Jr., B.S., Ch. *Red Bank, N. J.*
Muhlenberg, 1922

Rich, Vina Currier, B.A., Eh. *Brewer*
Bates, 1918

Ris, Howard Clinton, A.B., Pa. *Freeport, N. Y.*
Duke, 1938

Robert, Robert Pierre, B.S., Ed. *Wiscasset*
U. S. Naval Academy, 1923

Roderick, Drusilla Martha, B.S., He. *Augusta*
Maine, 1934

Rowe, Mary Ellen, A.B., Ed. *West Minot*
Bates, 1935

Sabel, Reinhardt Gottlieb, B.S., B.E., Ed. *Plainville, Conn.*
Massachusetts Institute of Technology, 1933;
Teachers College of Connecticut, 1934

Sargent, Abby Louise, B.A., Ed. *Sargentville*
Maine, 1932

Saunders, Ethel Stover, B.A. in Ed., Ed. *Bucksport*
Maine, 1931

Schmitt, Leonard John, A.B., Ed. *New Britain, Conn.*
Kentucky Wesleyan, 1931

Schwartz, Leonard C., B.A., M.A., Es. *Fredonia, N. Y.*
Hillsdale, 1928;
Albany State Teachers College, 1935

Scribner, Josephine Clark, B.A., Ed. *Newport*
Colby, 1908

Sherman, Ivan Cecil, B.A., Eh. *Union*
Maine, 1932

Shibles, Perry Foster, B.S., Ed. *Dover-Foxcroft*
Colby, 1927

Shively, Audrey Peters, B.S., He. *Andover, N. H.*
Ohio State, 1920

Shostak, Jerome H., B.A., M.S., Eh. *Brooklyn, N. Y.*
College of the City of New York, 1933; 1934

Simmons, Dana Maxwell, B.S., Ed. *Orono*
Colby, 1931

Smart, John Irvine, B.S., Ed. *Howland*
Colby, 1927

Smith, Hiram LeRoy, Jr., B.S., Ch.Eng. *Huntington, W. Va.*
Maine, 1938

Smith, Jeanette Frances, A.B., B.M.E., Eh. *Braidwood, Ill.*
Illinois Wesleyan, 1932; 1933

Smith, Lemira Campbell, B.S., Ms. *Middleboro, Mass.*
Bridgewater State Teachers College, 1935

Smith, Lucille Estelle, B.A., Ed. *Brewer*
Maine, 1921

Smith, Margaret White, B.A., Ed. *Winterport*
Maine, 1927

Smith, Mary Lucretia, B.A., Eh. *Ashland*
Colby, 1933

Spalding, Edward Lewis, B.S., Ed. *Newburyport, Mass.*
Maine, 1935

Spear, Earle Maynard, B.A., Ed. *Waldoboro*
Maine, 1927

Stanley, Sherwin Leavitt, B.A. in Ed., Ed. *Raymond*
Maine, 1933

Staples, Frema Louise, B.S., He. *North Berwick*
Farmington Normal, 1929

Stroup, Sheridan, B.S., Ch. *Kittanning, Pa.*
Thiel College, 1934

Sturke, Ralph Chester, B.S. in Ed., Ed. *Pembroke*
Maine, 1938

Sullivan, John Ronald, B.S., Ed. *Brownville Junction*
Holy Cross, 1934

Sweetser, Lawrence Richardson, B.S., Ed. *Presque Isle*
Maine, 1932

Szabo, Joseph Frank, B.S., Ed. *New Britain, Conn.*
Springfield College, 1936

Tarbox, Fred August, B.S., Py. *Calais*
Colby, 1923

Thompson, Vera June, B.Pd., Ed. *Marblehead, Mass.*
Maine, 1922

Thurston, Frederick Lovejoy, A.B., Zo. *Bangor*
Bates, 1906

Todd, Ruth Josephine, B.S., He. *Caribou*
Maine, 1935

Treworgy, Melvin Thomas, B.S., Ed. *Milo*
Colby, 1931

Trice, Otis Milton, A.B., Ed. *Hurlock, Md.*
Western Maryland, 1930
Varnam, Doris Elizabeth, B.S., He. *Steep Falls*
Maine, 1934
Wall, Hubert Gordon, B.S., Ed. *Caribou*
U. S. Naval Academy, 1938
Ward, Frederick George, B.S., Ed. *Sharon, Mass.*
Norwich University, 1933
Warner, Beryl Elisabeth, B.A., Ms. *Bangor*
Maine, 1935
Warren, Phyllis, B.S., Ed. *Northampton, Mass.*
Worcester State Teachers College, 1931
Waterhouse, Frank Chester, B.A., Hy. *Old Town*
Maine, 1933
Waterhouse, Mary, B.S., Ed. *Biddeford*
Maine, 1925
Watson, Jean Margaret, A.B., Ch. *Houlton*
Colby, 1929
Watt, Arthur, B.S., Ed. *Greenfield, Mass.*
Northeastern, 1928
Welch, Evelyn Cecilia, B.S., Ed. *Bangor*
Simmons, 1934
Wells, Dorothy, B.S., He. *Christmas Cove*
Teachers College, Columbia, 1932
White, Marjorie, A.B., Ms. *Newport*
Bates, 1918
White, Nathan William, B.S., Ed. *Presque Isle*
Maine, 1935
Wolfgang, Roy William, B.S., Ms. *Upper Darby, Pa.*
Juniata College, 1923
Worcester, Frank Clark, B.A., Ed. *Winterport*
Maine, 1920
Wortman, Perry Gilbert, B.S., Ed. *Greenville*
Colby, 1933
Wray, Ruth Arline, B.A., Ed. *Brewer*
Maine, 1920
York, Marsters Eugene, B.A., Eh. *Winthrop*
Aurora College, 1938
Zabrowsky, Mary Frances, B.A., Eh. *Freeport, N. Y.*
Cedar Crest College, 1934

Cotter, John Bradley, B.S. Maine, 1933	*Orono*
Cousins, Edith Mary	*Old Town*
Cowin, Mary Alexia	*Orono*
Crockett, Harriette Harmon	*Dover-Foxcroft*
Croxford, Erma Devereux	*North Penobscot*
Cunningham, Eleanor Louise	*Bucksport*
Curran, William Patrick, B.S Fordham, 1935	*South Portland*
Currie, Charlotte Hope	*Hartland*
Currie, Margaret Marlon	*Philadelphia, Pa.*
Curtis, Elisabeth Story	*West Roxbury, Mass.*
Daigle, Claire Delia	*Bangor*
Darroch, William Clifton	*Princeton*
Davies, John Rennsey, III	*Philadelphia, Pa.*
Davies, Stanley Edward	*Scotia, N. Y.*
Davis, Erna Eliza	*Bucksport*
Davis, Evangeline Rosamond	*West Jonesport*
Davis, Frances Cole	*Rumford Center*
Davis, Gertrude Chadbourne	*Hampden Highlands*
Davis, Ruth	*Eastport*
Day, Clarence Albert, M.S. Maine, 1929	*Orono*
DeGaetano, Vera, B.S. Wisconsin, 1936	*Milwaukee, Wis.*
Dennett, Madeline Annette	*Bangor*
Dickerson, Gladys Belle	*Chester, N. J.*
Dingwall, Dorothy, A.B. Colby, 1933	*Presque Isle*
Dobbins, Helen Gertrude	*Houlton*
Dolan, Charles Richard, A.B. Colby, 1938	*Machias*
Donaldson, Theodore	*West Orange, N. J.*
Dorsey, Margaret McCormick	*Bridgeport, Conn.*
Douglass, John Quinn	*Hallowell*
Dreisel, Helen Alice	*Lawrence, Mass.*
Dresser, Dorothy Kingsbury	*East Corinth*
Drinkwater, Edna Antoinette	*Belfast*
Drisko, Frank Eugene	*Harrington*
Drisko, Laurence Myron	*Columbia Falls*
Dunning, Herbert Harris	*Boston, Mass.*
Eastman, Eleanor	*Providence, R. I.*

Eaton, Stanley Boyd, B.S. Maine, 1931 — *Howland*
Edwards, Dorothy Karow — *Rumson, N. J.*
Emery, Elsie Beverage — *Guilford*
English, Florence Virginia — *Somerville, Mass.*
Epstein, Marjorie — *Bangor*
Fahey, John Henry — *Bangor*
Farnsworth, George Warren — *Pittsfield*
Fernandez, Ramon Fernando — *Old Town*
Finnern, Mabel Sophia — *West Chicago, Ill.*
Fish, Laurie Mae — *Belfast*
Fisher, Beth Aralyn — *Pembroke*
Folsom, Doris Lewis — *Newport*
Folsom, Marie Theresa — *Orono*
Folsom, Phillips Emery — *Biddeford*
Ford, Arlene Sibley — *Dixmont*
Ford, William George — *South Hadley Falls, Mass.*
Foster, William Charles, B.S. Colby, 1932 — *Princeton*
Fowler, John Homer, A.B. Amherst, 1929 — *Thompsonville, Conn.*
Freedman, Adele C. — *Philadelphia, Pa.*
Gallo, Mary Theresa — *Millinocket*
Gardner, Caroline, B.A., A.M. Milwaukee-Downer, 1929; Chicago, 1930 — *Milwaukee, Wis.*
Gass, Esther — *Bangor*
Gayton, Evelene Eleanor — *Lewiston*
Gillette, Charlotte Gordon — *Manchester, Conn.*
Gleason, Edward Holden — *Colebrook, N. H.*
Gleason, Magnus C. — *Glens Falls, N. Y.*
Graham, Edna Helen, B.P.E. American College of Physical Education, 1922 — *Easthampton, Mass.*
Grant, Buford Leach — *Bangor*
Green, Alice Marion — *Eastport*
Green, Verna Muriel — *Dover-Foxcroft*
Griffin, Carol Howe, A.B. Agnes Scott College, 1935 — *Connecticut*
Griffin, William Frank — *Pittsfield*
Griswold, Julia Bell, A.B., M.A. Washington University, 1905, 1915 — *Clayton, Mo.*
Hackett, Imogene Jordan — *East Auburn*
Hall, Norman Charles — *Dalton, Mass.*

Hamilton, Robert John	*Madison*
Hamilton, Ruth Dresser	*Prospect Harbor*
Hamm, Charlotte Cross	*South Paris*
Hannon, Esther Mary	*New Britain, Conn.*
Harlow, Laurence Joseph	*Barre Plains, Mass.*
Harriman, John Franklin	*Bar Harbor*
Hartnett, Margaret Catherine	*Moravia, N. Y.*
Harvey, Ilga Frances	*New Britain, Conn.*
Hartwell, Olive Susanna, B.S. Wisconsin, 1937	*Madison, Wis.*
Haskell, Mary Louise	*Rockland*
Hatfield, William Barr, B.S. Columbia, 1931	*South Brewer*
Hathorn, Doris Runnals	*Dover-Foxcroft*
Henkel, C. Vernon, Jr.	*Lynchburg, Va.*
Hewes, Nina Sheldon	*Carmel*
Higgins, Orin Jackson	*Mapleton*
Hill, Helen Jenny	*Chazy, N. Y.*
Hinckley, Mildred Chase	*Blue Hill*
Hinkley, Philip Joseph	*Cumberland Mills*
Hinson, Hattie Dezendorf	*Bound Brook, N. J.*
Hirsh, Reynolds Louis, Jr.	*New York, N. Y.*
Hogan, Medora	*Farmington*
Holbrook, Josephine Hazel	*Plymouth*
Hollister, Jane Gordon	*Circleville, N. Y.*
Holt, Martha Hannah	*Pawtucket, R. I.*
Howard, Doris Mae	*Fort Fairfield*
Hoyt, Rachel Elzena	*Easton*
Hunnewell, Althea Mae	*Caratunk*
Hunt, William Harry	*Augusta*
Hutchins, Curtis Marshall, A.B. Williams, 1928	*Bangor*
Hutchins, Ruth Rich, B.A. Smith, 1930	*Bangor*
Hutchinson, Eloise Audine	*Skowhegan*
Ingraham, Herbert Shepherd, A.B., Ed.M. Bowdoin, 1922; Harvard, 1927	*Skowhegan*
Iorio, Adela Dorothy	*Morristown, N. J.*
Irons, Mary Ellen	*Bergenfield, N. J.*
Jackson, Clifton Walter	*Monson*
Jellison, Arthur William	*Boothbay Harbor*

Jellison, Elizabeth	*Boothbay Harbor*
Johnson, Elspeth Burnett	*Gloucester, Mass.*
Johnson, Helen	*Putnam, Conn.*
Johnson, Nels Harold	*Southbridge, Mass.*
Johnson, Ronald Charles	*Perry*
Johnson, Thelma Ingred	*Putnam, Conn.*
Jones, Audry Lulu	*Lubec*
Jones, Clyde Percival	*Bangor*
Jones, James Earle	*Hartford, Conn.*
Jordan, Ralph Leo	*Bangor*
Kampfe, Doris Louise	*Morristown, N. J.*
Kaufman, Rhoda	*Brooklyn, N. Y.*
Kearns, Marguerite Thornton	*New York, N. Y.*
Kelley, Esther Mary	*Orono*
Keen, Harriet Elizabeth	*Rochester, N. Y.*
Kennedy, Lou, B.A., M.A., Ph.D. State University of Iowa, 1911; Stanford, 1922; Wisconsin, 1930	*Brooklyn, N. Y.*
Kenny, Helen Elizabeth, B.A., M.A. St. Josephs College, 1928; Fordham, 1932	*Lynbrook, L. I., N. Y.*
Kent, Frank Holmes	*Springfield*
King, Charlotte Edith	*Bath*
King, Delmar Harding, B.S. Bowdoin, 1925	*Bar Harbor*
Kirkland, Robert Corwin	*Indian Orchard, Mass.*
Kissner, Emanuel	*Brooklyn, N. Y.*
Knapp, Leda Burrill	*Old Town*
Kumin, Pauline Esther	*Athol, Mass.*
Kuhn, Louis Joseph	*Yonkers, N. Y.*
Kurlansky, Ida Ruth	*Milford, Mass.*
Ladner, Mildred Ann	*Washington, D. C.*
LaFlamme, Vincent John	*Great Works*
Lawrence, Charles F.	*Harrington*
Leahy, James Francis	*Fitchburg, Mass.*
Leighton, Melvin Theodore	*Bangor*
Leining, Charles Frederick	*Mt. Vernon, N. Y.*
Lemoine, Edville George	*Kennebunk*
Lieberman, James	*Bridgton*
Liscomb, Mary Elizabeth	*Bar Harbor*
Littlefield, Eleanor Mae	*Costigan*
Littlefield, John Thomas	*Brewer*
Littlefield, Julia Olive	*Stillwater*

Lloyd, Ethel Mae — *Scarsport*
Long, Garnet — *Kingsville, Ohio*
Look, Leon James, LL.B. — *Addison*
Suffolk University, 1938
Loomis, Madeline Jane — *Middlefield, Ohio*
Lunn, Hazel Elizabeth — *Milltown*
Lutes, Olin Silas, Jr. — *Orono*
McCall, William Hubert — *Bass River, Mass.*
McCard, Ada Drake — *Corinth*
McCarthy, Madeline Helen — *Charlestown, Mass.*
McCarthy, Mary Elizabeth — *Bangor*
McCarthy, Albert William, A.B. — *Rockland*
Holy Cross, 1934
McConachie, Adele J. — *Springfield, Mass.*
McCormack, Mary Medora — *White Plains, N. Y.*
McCormick, Rose Caroline — *Concord, N. H.*
McCully, Eloise Brown — *Pittsfield*
McDowell, Edna Mae, B.S., M.A. — *Brooklyn, N. Y.*
East Stroudsbury State Teachers College, 1927;
New York University, 1936
McGuire, Mildred Eddy — *Bangor*
McIntosh, Ada Viola — *Houlton*
McLenithan, Ethel Isabelle — *Cambridge, N. Y.*
McLenithan, Jane Mae — *Cambridge, N. Y.*
MacCready, Harry Leigh, Jr. — *Taunton, Mass.*
MacDonald, John Allan, A.B. — *Waterville*
Colby, 1937
MacFadyen, Louise Estelle — *Dover-Foxcroft*
MacLeod, Effie Smith — *New Haven, Conn.*
Macklem, Harold George — *Hamilton, Ohio*
Madden, Veda Thomas — *Milford*
Maines, Virginia Pearl — *Portland*
Malcolm, Leon Tibbetts — *Augusta*
Malins, Victor Patrick — *Saugatuck, Conn.*
Mann, Ivie Wendell — *Hodgdon*
Manning, Margaret Mary — *Rochester, N. Y.*
Marston, Grace Dunton — *Westbrook*
Marston, Leslie Pembroke — *Westbrook*
Matteson, Mildred G. — *Johnson City, N. Y.*
May, Lucy Eager — *Kansas City, Kans.*
Mayo, Erskine Bronson, Jr. — *Westfield, N. J.*
Mayo, Inez Daphne — *Brewer*

Mears, Natalie Maudsley	*Essex, Mass.*
Merrill, Edward Osgood	*Orono*
Merritt, Charles Emery	*Rockland*
Miller, Austin Wallace	*Bangor*
Miller, Izeyl Eva, A.B. Washington University, 1918	*Webster Groves, Mo.*
Miller, Lenone Aletha	*East Holden*
Mitchell, Nahum Wentworth, Jr.	*West Newfield*
Moan, LeRoy Wesley	*Machias*
Moan, Marian Jane	*Machias*
Moan, Muriel Florence	*Machias*
Moore, Elizabeth, B.S. St. Elizabeth College, 1935	*Yonkers, N. Y.*
Moore, Lula Belle, A.B. Nebraska Wesleyan, 1932	*Lincoln, Nebr.*
Moore, Luther Franklin, Jr., A.B., M.A. Stanford, 1929, 1931	*Houlton*
Moores, Thelma	*Springfield*
Morong, Raymond Lee	*Madison*
Morse, Thelma E., A.B. Juniata College, 1929	*Bedford, Pa.*
Moulton, Virginia	*Bangor*
Mueller, Clara Helen, B.A., M.A. Carroll, 1918; Wisconsin, 1924	*Oxford, Ohio*
Murphy, Elizabeth Florence, B.A., M.A. Maine, 1930, 1934	*Bangor*
Murphy, Mary Alice	*Bangor*
Myers, Frank William, B.A. Maine, 1935	*Old Town*
Natwick, Mae Jacobson	*Wisconsin Rapids, Wis.*
Newell, Robert Harold	*Plainville, Conn.*
Newton, Clark Lewis	*Medford, Mass.*
Nickerson, Thomas Henry	*Harrington*
Novak, Helene Anne	*Bangor*
O'Connor, Mary Teresa	*Meriden, Conn.*
O'Grady, Robert Joseph	*New London, Conn.*
Ogren, Ruth Augusta	*Hartford, Conn.*
O'Hanlon, Herbert W.	*Brooklyn, N. Y.*
Olander, Paul Herbert William	*Ellsworth*
Olds, Corwin Horace	*Rockland*
O'Neil, Anna Elizabeth	*Carmel*
Orcutt, Carolyn Silsby	*Amherst*

Orr, Mary Josephine	*Old Town*
Osborn, Doris Irena	*Unionville, Conn.*
Osborn, Genevieve Smith	*Unionville, Conn.*
Packard, Ned Williams, A.B. Bowdoin, 1933	*Winterport*
Paris, John Paul Bridge	*Bethlehem, Pa.*
Parker, Harold Franklin	*Lee, Mass.*
Parker, Madeline Roseann	*Bangor*
Parsons, Ellen	*Capeville, Va.*
Patterson, Arline	*Jersey City, N. J.*
Payette, Arthur Evans	*Attleboro, Mass.*
Peach, Olive Marie	*Pittsburgh, Pa.*
Perrin, Myrtice Abby	*Attleboro, Mass.*
Perrow, Sallie Tabitha, B.S. Farmville State Teachers College, 1936	*Lynchburg, Va.*
Perry, Dorothy Edith	*Carmel*
Perry, Ellen Sarah	*Carmel*
Phillips, Chrystal Marsh	*East Holden*
Pickering, Carl Wyvern, B..A Maine, 1933	*Deer Isle*
Pierce, Faith Elizabeth, B.S., A.M. Northwestern, 1925; Columbia, 1931	*Watertown, N. Y.*
Plahte, Viktor	*New York, N. Y.*
Poland, Mary Dennis, B.S., Ph.D. Harrodsburg, 1886; New York University, 1892	*Newark, N. J.*
Post, John Frank	*New York, N. Y.*
Preissel, Millicent Caroline	*New Britain, Conn.*
Pride, Lona Althea, B..S in Ed. Boston University, 1932	*Island Falls*
Puffer, Roberta	*Columbia*
Qualey, Philip Paul, B.A., A.M. New Hampshire, 1931; Columbia, 1933	*Dover, N. H.*
Quattrocchi, Anthony Joseph	*Fort Edward, N. Y.*
Raby, Adrienne Marie, A.B., LL.B. Smith, 1914; American Extension University, 1932	*New Britain, Conn.*
Rae, Benjamin Garfield, Jr.	*West Newton, Mass.*
Ramage, Kenneth Haycroft	*Lincoln, N. H.*
Ray, Margaret Blanche	*Gorham, N. H.*
Rhind, Ethel Knowlton	*Stillwater*
Riani, Serafina	*Keeseville, N. Y.*
Rich, Carrie Belle	*East Holden*
Richards, Lena	*St. Albans*

Rippon, Maude Marion	*Parksley, Va.*
Roberts, Gwilym Richard	*Brownville*
Robinson, Glenn Meredith	*Bangor*
Royal, Florence Taylor, B.A., M.A. Maine, 1911, 1937	*Branford, Conn.*
Royal, Floyd C.	*Hodgdon*
Ryan, Gertrude Georgiana	*Hempstead, L. I., N. Y.*
Ryan, Mary Hyatt	*Hyattstown, Md.*
Sadler, Rudolph Charles	*Limerick*
Sawyer, Neil Gould	*Easton*
Scanlin, Donald Alexander	*Newport*
Schweitzer, Edna Ruby	*Clare, Ill.*
Seavey, Barbara Eunice	*Bangor*
Seeley, Flora Alice	*Sandy Point*
Sheppard, Fay	*Plainfield, N. J.*
Shostack, Edna, B.A. College of the City of New York, 1935	*Brooklyn, N. Y.*
Silsby, Edward Homer	*Bangor*
Silver, Dorothy	*Bangor*
Skachinske, Vincent Jonathan	*Meriden, Conn.*
Smart, Omar Collins	*Winterport*
Smith, Clayton Eugene	*Rockport*
Smith, Grant	*Schenectady, N. Y.*
Smith, Harry Wallace	*Bucksport*
Smith, Hilda Scott, Ph.B. Vermont, 1931	*Easthampton, Mass.*
Smith, Letitia Evyline	*Derby*
Smith, Martha Critchell	*Bucksport*
Smith, Thelma Edra	*Brewer*
Snider, Rose, B.A., M.A. Maine, 1933, 1936	*Portland*
Soper, Beverly Jayne	*Newport*
Soper, Marie Jewett	*Newport*
Soule, Laurence William	*Augusta*
Southard, Alma Avis	*Kenduskeag*
Spalding, Lottie Howard	*Woodstock, Conn.*
Speirs, Ernest Lincoln	*Westbrook*
Spencer, Carl Edward	*Anson*
Spruce, Helen Carmelita	*Old Town*
Stacy, Dora Louise	*Shirley*
Starkey, Richard Owen	*Orono*
Starr, Eva Jones	*Orono*

Stebbings, Winnifred Goodwin, B.S. in Ed. Boston University, 1936	*St. John, N. B.*
Stevens, Machaon Edward	*Waterville*
Stevens, Robert Walter	*Beaver Falls, N. Y.*
Steward, Rebecca Pennell	*Corinna*
Stewart, Robert Frank	*Winthrop*
Stinson, Lois Elizabeth	*Stonington*
St. John, Christy Anne	*Fort Kent*
Stockholm, Harold Yager	*Poughkeepsie, N. Y.*
Striar, Louis	*Bangor*
Strout, Francis Leroy	*Milbridge*
Sutcliffe, Roselyn	*New Haven, Conn.*
Suydam, John Richard, A.B., Ch.Eng., Ph.D. Harvard, 1909; Columbia, 1912, 1914	*Southboro, Mass.*
Swett, Arthur Howard	*Newport*
Tarbell, Lester Joseph	*Smyrna Mills*
Thompson, Mary Virginia	*Calais*
Thompson, Mildred Ada	*Orono*
Thorne, Pamelia Melcher	*Turner Center*
Thorne, Thelma Frances	*St. Albans*
Tibbetts, Jason Richard	*Liberty*
Tillotson, Jessie Lemyra	*Akron, Ohio*
Treat, George Currier	*Bangor*
Troxell, Catherine Agnes	*Altoona, Pa.*
VanCott, Stuart W.	*Bangor*
VanNostrand, Elaine Elizabeth	*Somerville, N. J.*
Violette, Raoul Henry, B.S. Colby, 1933	*Waterville*
Walker, Pearl Marsh	*South Gouldsboro*
Wallace, Mora Catherine	*Houlton*
Wallace, Rosalind Mary, A..B Brown, 1934	*Apponaug, R. I.*
Wardwell, Ernest Roscoe	*Castine*
Warner, Helen Althea	*Bangor*
Wass, Philmore Burlan	*Machias*
Wasson, Gerald Andrew	*Calais*
Watson, Grace Madeline	*Oakland*
Webber, Frances Katharine	*Dover-Foxcroft*
Webber, Lewis Ervin	*Saco*
Webber, Louise Clark	*Saco*

Wentworth, Marjorie Lee	*Bangor*
Wentworth, Owen	*Kennebunkport*
Weston, Susan Houghton, A.B. Colby, 1906	*Wilton*
Weymouth, Frank Leslie Day, A.B. Clark, 1925	*New Bedford, Mass.*
White, Howard Rawson, B.A., M.A., Ph.D. Buffalo, 1932, 1933; State University of Iowa, 1936	*Orono*
Whitmore, Gladys Ella	*Southwest Harbor*
Whitney, Anne Lou	*Old Town*
Whitney, Eva Amelia	*Kenduskeag*
Williams, Emma Louise	*Boothbay Harbor*
Williams, Frank Raymond	*Mechanic Falls*
Williams, Hildred Alma	*Selden*
Wing, Carl Leo	*Canton*
Wing, Marguerite Elaine	*Canton*
Wingert, Wilhelmina	*Wellersburg, Pa.*
Witham, Henrietta Simonson	*Clinton*
Witte, Elizabeth Catherine	*Bangor*
Wolfe, Priscilla M.	*Brooklyn, N. Y.*
Wolverton, Frances Charlotte	*Bangor*
Wong, Helen Elizabeth	*Bangor*
Woodsum, Harriet	*Bangor*
Worcester, Francis, Jr., A.B. Dartmouth, 1938	*Aurora, Ill.*
Wyman, Audrey Emeline	*Waldoboro*
Wyman, Walter Edward	*Brewer*
York, Alfreda Wheeler	*Plainfield, Vt.*
Young, Clayton Ernest	*Matinicus*

STUDENTS AT MARINE BIOLOGICAL STATION, LAMOINE

Carr, Charles David, A.B., M.S. Holy Cross, 1927; Notre Dame, 1931	*Bridgeport, Conn.*
Goulding, Helen Josephine	*Toronto, Ont.*
*Mansfield, Agnes Lucy, B.A. Smith, 1938	*New Haven, Conn.*
Pratt, Elbert Sewall	*Livermore Falls*
Taylor, Harold Stone	*Biddeford*

*Wendell, Walter Emerson, B.Ed. Brown, 1933	*Providence, R. I.*
*Kroll, Henry Michael, B.A. Clark, 1938	*New York, N. Y.*

* Candidate for a Master's degree.

Summary of Student Enrollment

1938–1939

	Total	Men	Women
Graduates	68	52	16
Seniors	331	220	111
Juniors	405	300	105
Sophomores	471	356	115
Freshmen	541	413	128
Specials	45	37	8
Upperclass Students conditioned for admission	5	4	1
Two-Year Agriculture			
1st Year	35	35	—
2nd Year	15	15	—
Short Course in Agriculture	13	12	1
	1929	1444	485
Summer Session	648	279	369
Grand Total (omitting duplicates in Summer Session)	2519	1684	835

Classification by Colleges

Graduate Study	68	52	16
College of Agriculture	629	455	174
College of Arts and Sciences	601	339	262
College of Technology	555	553	2
School of Education	76	45	31
	1929	1444	485

Candidates for Degrees

Graduate Study	57	44	13
College of Agriculture	563	390	173

College of Arts and Sciences	582	327	255
College of Technology	540	538	2
School of Education	68	38	30
	1810	1337	473

Classification by Residence

Maine, by counties:

Androscoggin	74
Aroostook	192
Cumberland	205
Franklin	36
Hancock	106
Kennebec	105
Knox	68
Lincoln	31
Oxford	78
Penobscot	558
Piscataquis	59
Sagadahoc	25
Somerset	81
Waldo	67
Washington	93
York	82

	1860
Maine	1860
Massachusetts	284
New York	130
Connecticut	72
New Jersey	48
New Hampshire	19
Pennsylvania	17
Rhode Island	13
Illinois	8
Ohio	7
Maryland	6
Vermont	6
Virginia	6
Wisconsin	6

Missouri	4
District of Columbia	2
Florida	2
Iowa	2
Nebraska	2
Arizona	1
Delaware	1
Idaho	1
Kansas	1
Michigan	1
Minnesota	1
South Carolina	1
Tennessee	1
Utah	1
West Virginia	1
Canada	7
Canal Zone	2
China	2
France	1
Philippine Islands	2
Territory of Hawaii	1
	2519

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